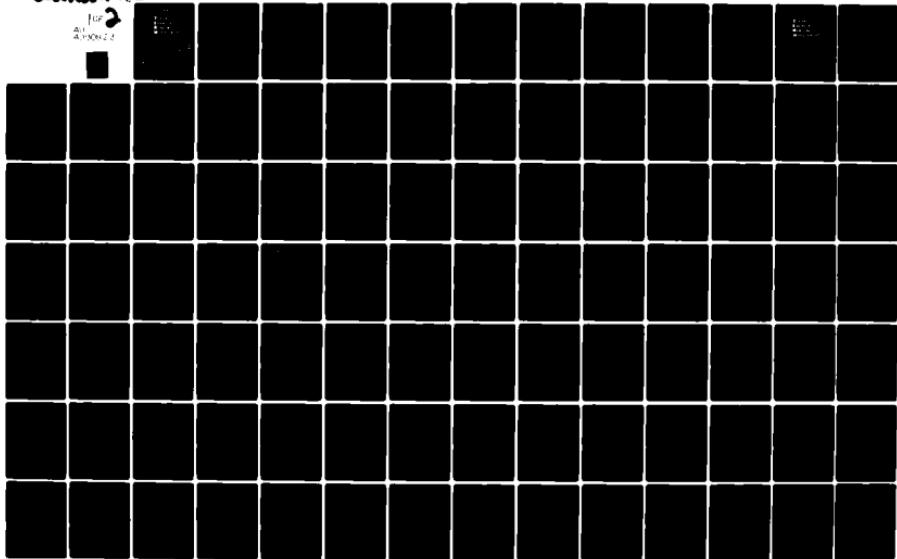


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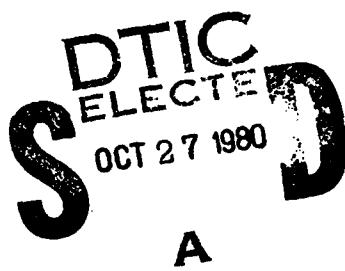
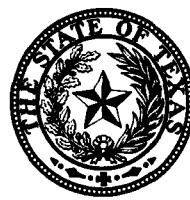
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A STUDY IN:

TEXAS EMERGENCY RESOURCE MANAGEMENT

VOL. I



Final Report

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Work Unit 4351-E

September 1979

Division of Disaster Emergency Services
Texas Department of Public Safety
Austin, Texas

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DETACHABLE SUMMARY

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The findings in this report, published in two volumes, are based on the Texas Emergency Resource Management (TERM) Plan and incorporate information and ideas from seven of nine states queried relative to emergency resources management during the crisis relocation mode. An analysis and evaluation of the effectiveness of existing emergency resource management plans was made to determine if basic operational concepts contained therein are compatible with and applicable to FEMA guidance on Crisis Relocation Planning. Volume I includes a discussion of State organization and emergency resources management, State agency functional assignments and a discussion of other States' problems in emergency resources management planning. Volume II, appropriate and applicable specifically to the State of Texas, is a model state emergency resources management plan.

To sustain human life, resources are needed. Certain resources are essential while others are not life sustaining which means that essentials have to be identified beforehand. As a result, at least three elements are necessary to the application of needed resources. One is the "availability" of resources at their respective sources; two is the "acquisition" of the resources and "placing" them in the locations where they will be used; and, three, the "management" of these resources in a manner befitting the amount of resources in relation to the length of time they must last even though the time period may be questionable, undefinable or indefinite.

The availability of resources will be directly related to the management of effective planning actions taken beforehand. Essential survival items must be identified and the manufacturers and businesses producing these items need to be located and arrangements must be made to keep them in operation.

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major items of planning if the resources are to maintain their usability and potential for management at their ultimate distribution point.

The management of these essential resources from the ultimate distribution point is viewed as a problem for local government since local government is where the people are located and where the brunt of the disaster will be felt. That is not to say that local government cannot be assisted by State government. However, it is obvious that a very limited number of State people will be available to help in such a massive effort. Advanced planning and coordination are necessary if there is to be an assessment of the situation as it will be during the disaster period; and, to make adequate provisions for efficient and frugal management of essentials during these critical times.

It is the management of essential resources that is of concern in this study and in Texas, this will be handled at State level by a Resources Priority Board. This Board is comprised of representation from approximately thirty-one (31) State agencies which have essential resource management responsibilities and includes members of the Disaster Emergency Services Council. Rapport is maintained

with local government through the seventeen (17) disaster districts which cover the entire State.

Although industrial activity is based on the supply and demand concept, the response time for industry to detect a population shift and make adjustments in placing their respective resources to meet demands, most likely, would be excessive and cause undue hardships for people in host areas.

In order for industry to effectively meet the needs imposed on it at national, state, and local levels, help is needed from the Federal, State, and local governments. Liaison must be established with appropriate industry by government planners so that requirements can be explained and updated continuously. This will allow industry officials to make plans and acquire equipment and materials for the expected demands for these resources.

Since each level of government has different relationships and requirements for industrial participation, each must establish its own liaison so that industrial understanding of planning requirements will suit that of the appropriate government action it is supporting.

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One advantage of a money economy would be to reduce the State or Federal government expense of paying for the use of all resources used during crisis relocation.

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solutions in some states varied because of varied concepts and organizations within the states.

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A STUDY IN:

TEXAS
EMERGENCY
RESOURCE
MANAGEMENT.

Vol. I

by
Ashley C. Eledge
Robert L. Orton
Soon O. Merz

For
Federal Emergency Management Agency
Washington, D.C. 20472
Final Report, September 1979

Contract DCPA 01-78-C-0321
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Texas Department of Public Safety
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20 ABSTRACT (Continue on reverse side if necessary and identify by block number) This document is Volume I of Texas Emergency Resource Management (TERM), a study which analyzes the methods, procedures and techniques for constructing a state plan for the emergency management of resources in a nuclear attack emergency or crisis relocation of the population from high risk areas to areas of lesser risk. The study contains organizational charts for each grouping of essential resources and assignment of responsibilities for state agency action (Cont.)		

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Economic Stabilization
Health and Medical
Petroleum, Gas and Solid Fuel
Electric Power, Water
Industrial Production
Manpower, Transportation

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as well as a model state plan in Volume II. Volume I also contains information and ideas from seven of nine states' queries relative to emergency resources management during the crisis relocation phase of a national emergency.

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L I S T O F C H A R T S

- Division of Disaster Emergency Services Disaster District Boundaries
- State of Texas Economic Stabilization Organization
- State of Texas Emergency Resources Management Organization, Construction and Housing, State to Local Government
- State of Texas Emergency Resources Management Organization, Electric Power, State to Local Government
- State of Texas Emergency Resources Management Organization, Food, State to Local Government
- State of Texas Emergency Resources Management Organization, Petroleum, Gas and Solid Fuel, State to Local Government
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- State of Texas Emergency Resources Management Organization, Manpower, State to Local Government
- State of Texas Emergency Resources Management Organization, Transportation
- State of Texas Emergency Resources Management Organization, Water, State to Local Government
- State Agency Responsibility Assignment Matrix
- Current Planning Status of Queried States
- Emergency Resources Management Questionnaire
- Sample Sheet of Dun and Bradstreet Report Generator
- Major or Essential Industries by Standard Index Classification (SIC) Numbers
- Model State Emergency Resource Management Plan

PREFACE

Emergency resource management was a big effort throughout the United States in the early sixties, mostly as a result of the Cuban Missile Crisis. However, since then very little new or revised information has been published by the Federal government and individual state preparations have been minimal.

The introduction of crisis relocation has brought about renewed thinking in the emergency resource management field because of the problems with management of resources in a population relocation mode. This represents quite a drastic change from massive use of resources such as food, water, and electricity in an in-place living and shelter environment as previous plans considered.

The re-routing of resources to follow the population as it shifts from population centers to rural areas is a complex problem requiring much advanced coordination. Consider a 250,000 population risk area city is reduced to 50,000 total population and the 200,000 people who relocated are distributed throughout five counties increasing the population of the host areas by three times. As an example a city with normal population of 4,690 will be increased overnight to 14,070 people. This sudden jump to three

times a city's normal size is bound to place a strain on all resources and of particular concern are the critical items such as water, food, money, medical, etc.

Meanwhile, the risk area has suddenly gone from 250,000 down to 50,000 which produces overages of resources in the risk area. Some resources such as electricity cannot be stored and must be either re-routed or production reduced to match the new level of demand. Additional resources pipelines must be either shut-off or re-routed otherwise storage of excesses will be necessary and this could be a problem with frozen or other perishable products.

The two situations we are concerned with are the in-place shelter situation where warning period of an impending nuclear attack or massive disaster is less than three days in length; and, the crisis relocation situation which is a presidential option for mitigation should there be ample advance warning.

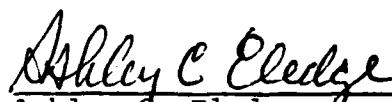
The in-place shelter situation is well covered in the existing Texas Emergency Resource Management Plan which needs only to be updated for names, agencies, titles and other minor information which normally deteriorates with time.

Crisis relocation on the other hand has only recently been recognized nationally as a Presidential option relative to nuclear war or widespread major natural disaster. It is not covered in the existing Texas Emergency Resource Management Plan.

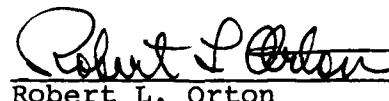
Some planners believe that to implement crisis relocation would be a disaster in itself. While this may be true, if it should be implemented without prior planning, a greater number of planners believe that by implementing a developed and coordinated plan in a cooperative atmosphere, crisis relocation can be successful and a great service to people in America can be performed. Assuming that the foregoing is true, the objective, quite naturally, would be to establish conditions which would produce the desired responsiveness by developing and coordinating a plan of action for implementation of crisis relocation.



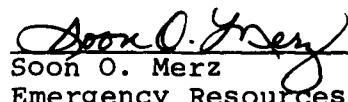
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CHAPTER 1
STATE ORGANIZATION AND EMERGENCY RESOURCES MANAGEMENT

Research for this chapter began with a search for documents within the Division which concerned emergency resources management or crisis relocation. The search continued into State agencies, appropriate Federal documents and Federal agencies. The most informative on emergency resources management was the Federal Preparedness Agency, Region Seven in Dallas now called the Federal Emergency Management Agency (FEMA). They were interested in our work and traveled to Austin to present a briefing on their postattack planned actions. They then sent us a copy of Iowa's recently published Emergency Resource Management Plan.

The definition of "resource management" as given in Iowa's Emergency Resource Management Plan is ". . . a means by which government, in connection with the private sector, identifies and responds to situations of shortages of vital resources or interruptions of vital services that could affect the safety or well-being of people of the State. . . ." This is as true at the initiation of crisis relocation as it is twenty (20) days after a nuclear attack. In all cases the objective is to manage resources on a required basis and discontinue managing them when resources are properly managing themselves.

The effective, efficient management of emergency resources requires a structure system of two-way communication comprised of various levels of government performing specific responsibilities within their relative jurisdictions.

Federal guidance emanates from the Federal Emergency Management Agency to State government, while at the same time Federal information gathering sources feed local government status and information through USDA channels and the Increased Readiness Information System (IRIS). State guidance emanates from the Resources Priorities Board to local government and information is supplied by local government as the situation allows.

The organizational structure for emergency management of State resources is displayed on Attachments 1 through 11 of this chapter.

When crisis relocation is implemented and demands for resources increase in rural areas and decrease in risk areas, management will reach its full test as people are moved from their familiar environment and placed in an unknown set of circumstances where they are strangers who may be without financial resources to purchase the familiar necessities of life and depend on someone else to identify and make arrangements for them. Crisis relocation planners say on one side of the coin that money will not be

used and resources will continue to be supplied by business people who will later claim against the Federal government but this has not been completely settled according to people in Federal Preparedness Administration (now FEMA). This could in fact be a "break the bank" act which would either reduce the governmental financial situation to minus zero or equalize individual finances throughout the country to where business people, due to their massive contribution to hosts in their area, would deplete their own resources.

Question 28 of Questions and Answers on Crisis Relocation, revised, dated March 30, 1979, states, "in the host areas, all economic activities would be kept in full operation insofar as possible."

The life blood of the State and the Nation is the economic activity associated with moving and exchanging goods and monetary resources for the health and well-being of the people within. Public confidence is an essential element in maintaining a healthy economy and possibly could be directly related to the vigor of economic activity.

Since the American economy is a money economy, bankers say that they must continue to function so that money will be available and public confidence in the economy will be maintained.

Although congregate care facilities will be set up in host areas and essential survival items will be controlled and made available to relocatees and host area people even if they do not have financially remunerative capability, a money economy will still exist insofar as possible. As a result, money will necessarily have to be made available to relocated people.

At the present time, there are problems with this. For one thing, people relocating will try to remove their money from the bank to protect it and take it with them into the host area. For another, if such action was possible, the law and order aspect of crisis relocation would be expanded because of large amounts of money in possession of individuals in the rural areas of the State. The third thing is that banks do not have on hand enough dollars to cover all account holders completely.

Should account holders begin withdrawing their money in cash, banks would either have to declare a forty-eight (48) hour moratorium or place a limit on the amount of money an account holder may withdraw. Either action would undermine public confidence in the economy and pave the way for its collapse. Additionally, as account holders demand their money before leaving town, violence at the banks is a real possibility if demands are not met.

It seems that the most acceptable avenue, for eliminating these money problems and still allow the economy to function, is for banks to engage in a vigorous information program to assure public confidence in the banking system that it will make their money available in some way that would preclude the need for withdrawing their money in cash.

The easiest and most effective way for a successful information program appears to be directly to those individuals and businesses having accounts with banks. The program has to be convincing enough to develop complete confidence in account holders that money will be available to them wherever they go in the host area or elsewhere in the State.

There must be two parts to this program. One part should be oriented to educating account holders that a duplicate set of records exists so that damage to their bank will not annihilate an individual bank account and cause a loss of all his money. The other part should develop a plan in host areas and throughout the State by inter-bank coordination and cooperation assuring that the individual account holder actually does have access to his money wherever he travels in the designated host areas. (This could serve as an incentive for account holders to relocate in prescribed host areas rather than taking off on their own to other areas should they be inclined to do so and the opportunity presents itself.)

Control of resources from the outset of crisis relocation is essential if maximum "mileage" is to be obtained from existing levels of supplies which will diminish because of reduced production and irregular patterns of distribution due to readjustment of delivery points.

The exact procedure or time sequence of events leading up to and the act of implementing crisis relocation is not determinable in advance as these factors must be flexible in their application to the situation at the time. As a result, the flexibility of these factors needs to be defined by describing their outer limits so that proper planning can be done to reflect the realistic happening of events leading to the ultimate upheaval--crisis relocation.

The first factor which needs describing is reaction time before departing one's home for an unknown location within the defined host area. Reaction times will vary according to the efficiency of the public information medium. Present plans are to use the Texas Department of Public Safety radio and teletype network, commercial radio, television and newspaper for carrying information released by local officials, State agencies related to civil defense actions, and the Federal Emergency Management Agency.

The time of implementation is the time of release for the movement order by the Governor, probably in response to

orders from the President of the United States proclaiming a national emergency which may or may not contain a declaration of assumption of his War Emergency Powers.

If Presidential War Emergency Powers are not proclaimed, the State most probably would have to bear the expense of crisis relocation if ordered; because, the Federal government may not be liable for expenses incurred prior to the President having War Emergency Powers.

Since there is no prescribed Presidential message initiating crisis relocation, it is impossible to determine the stage which will be set should such a message be issued. As a result, there must be at least two situations under which a Presidential message could be received. One is the lack of assumption of Presidential War Emergency Powers and the other is the initiating message with these powers.

Should there be no assumption of War Emergency Powers by the President, there may be some hesitancy by states to direct crisis relocation with the hesitancy being to a degree directly related to the believable sense of urgency at the time of the Presidential message.

There is a need for an implementing message to be prepared and promulgated in advance so that states will know what their status is should such a message be received in the State Emergency Operations Center.

The time element is another problem area. It has been said by crisis relocation planners that approximately three days are required to relocate people from risk areas without clarification of whether this is with no prior indication; or, with an advanced indication of from one day to two weeks that crisis relocation will be implemented.

Planning factors should consider the worst situation unless there is some reasonable reason not to do so. With this in mind, the worst possible consideration would be to implement crisis relocation without any advanced warning. This consideration is least probable because of at least two very good reasons: (1) a situation which had deteriorated to this point without any indications stands a very good chance of deteriorating too far in too short a time period to carry out crisis relocation and in such a situation it would be too risky for the population to implement crisis relocation, as a result "in-place" shelter would be the best choice; (2) at least twenty-four (24) hours preparation time is needed to disseminate information about designated host areas, transportation, routing procedures, host area congregate care facilities, etcetera to the general population throughout the State.

Therefore, it is envisioned that the worst situation under which crisis relocation would be implemented by the Governor in response to the Presidential declaration of this

option of twenty-four (24) hour advanced warning before initiating and three days implementation time.

As a consequence, crisis relocation plans and procedures should be arranged so they are "counted down" to implementation minus "twenty-four hours" and placed on hold until they need to be used.

This is the suggested solution at State level in the absence of positive guidelines from the Federal government.

The use of the Federal Increased Readiness Information System to provide inputs for the emergency resource management function was considered. An exercise conducted in 1975 with approximately twenty (20) reporting points throughout the State was reviewed. Comments from local government participants were most favorable since they were well-briefed and all inputs including their answers were given to them ahead of time. In addition, the exercise was on Saturday during a normal non-work period which allowed full uninterrupted concentration on the exercise.

Unfortunately this ideal situation would exist only during such an exercise. When information of this type is needed, the envisioned situation will be anything but ideal. There will be other activities varying from normal day-to-day duties to panic periods preceding and during implementation

of crisis relocation or the direction of people to shelter protection in-place. In addition, senders will have to generate their own substance for messages being dispatched to the State Emergency Operations Center. All of these things will simply detract from the efficiency and general acceptance of the system as a desirable, dependable, efficient information producing system portrayed by the exercise and results shown in the reports from exercise participants.

Aside from all that, information contained in the Increased Readiness Information System is not compatible with State disaster operations procedures. The intent is to avoid further complicating local government operations since that is where the brunt of any disaster is applied and that is where the peak of disaster related activity is focused. Causing additional reporting in the imminent or operational disaster phases is inconsiderate and irresponsible; although, it is acknowledged that the quality of response to requests for aid is related to the amount of background information available to the agency responding to the request. Therefore, there is some support for the Increased Readiness Information System reporting.

The State approach to disaster operations is to collect whatever information is available from communities experiencing disaster effects and then respond to their requests

for assistance when they need it. This procedure allows communities to pass information they believe to be appropriate at a time convenient to them and to further set the stage for response to their plea by including remarks with requests for assistance. At this time, communities are in a better position to supply additional information relative to their requests. If the responder believes further query is necessary to improve response actions this is the time for him to ask the community for more data.

Basically, the State operation is a demand and response system. The extra expense of additional people at State and local government levels and a supportive communications system necessary to expand the Increased Readiness Information System reporting to a more representative percentage of the 1,187 separate jurisdictions in the State would be prohibitive. In addition, modification of the information contained in the Increased Readiness Information System reporting to make it more usable at State level, would indeed be prohibitive insofar as its linkage with Federal requirements are concerned.

As there is in any operational procedure change, there must be some "give" and some "take" with "give" being what has to be surrendered to change and "take" being what the change will do to you in return. Both are not necessarily benefits but there may be some which are not immediately visible.

The use of the Increased Readiness Information System in emergency resources management seems to offer a great number of opportunities for "give" and "take" but very few opportunities for beneficial uses as far as State operational procedures, communication structure, and personnel strength are concerned. As a result, the Increased Readiness Information System as a supportive element for emergency resource management is not feasible for Texas at this time.

In conclusion, a State organization must tie in to all resources necessary for the survival of the maximum number of people in the State. This includes support of national objectives represented by Federal government agencies. Lines of communications should be clearly drawn to depict the exact relationship between these resources and the State government agency responsible for coordinating with them. Also these lines should show the relationship between these resources, their State government agency contact, the rest of the State organization and with the Federal government.

Research and coordination shows that the State of Texas organization does this very well with a central coordinating division, Disaster Emergency Services, for all State agencies which have emergency resource management responsibilities. The Division maintains a continuous alert

status and is co-located with a State-wide radio, teletype, and telephone network which also operates continuously and ties into the National Alerting and Warning System (NAWAS). The Division maintains and operates the State Emergency Operations Center where the Emergency Resources Priority Board will function as a combined group when necessary for safety and for quick, efficient, and cooperative operation in response to disaster related community requirements.

The large size of the State comprised of two hundred fifty-four (254) counties and approximately 1,187 political jurisdictions justifies the seventeen (17) disaster districts which have their own disaster district committees patterned after the State Disaster Emergency Services Council which deals directly with local (city and county) governments.

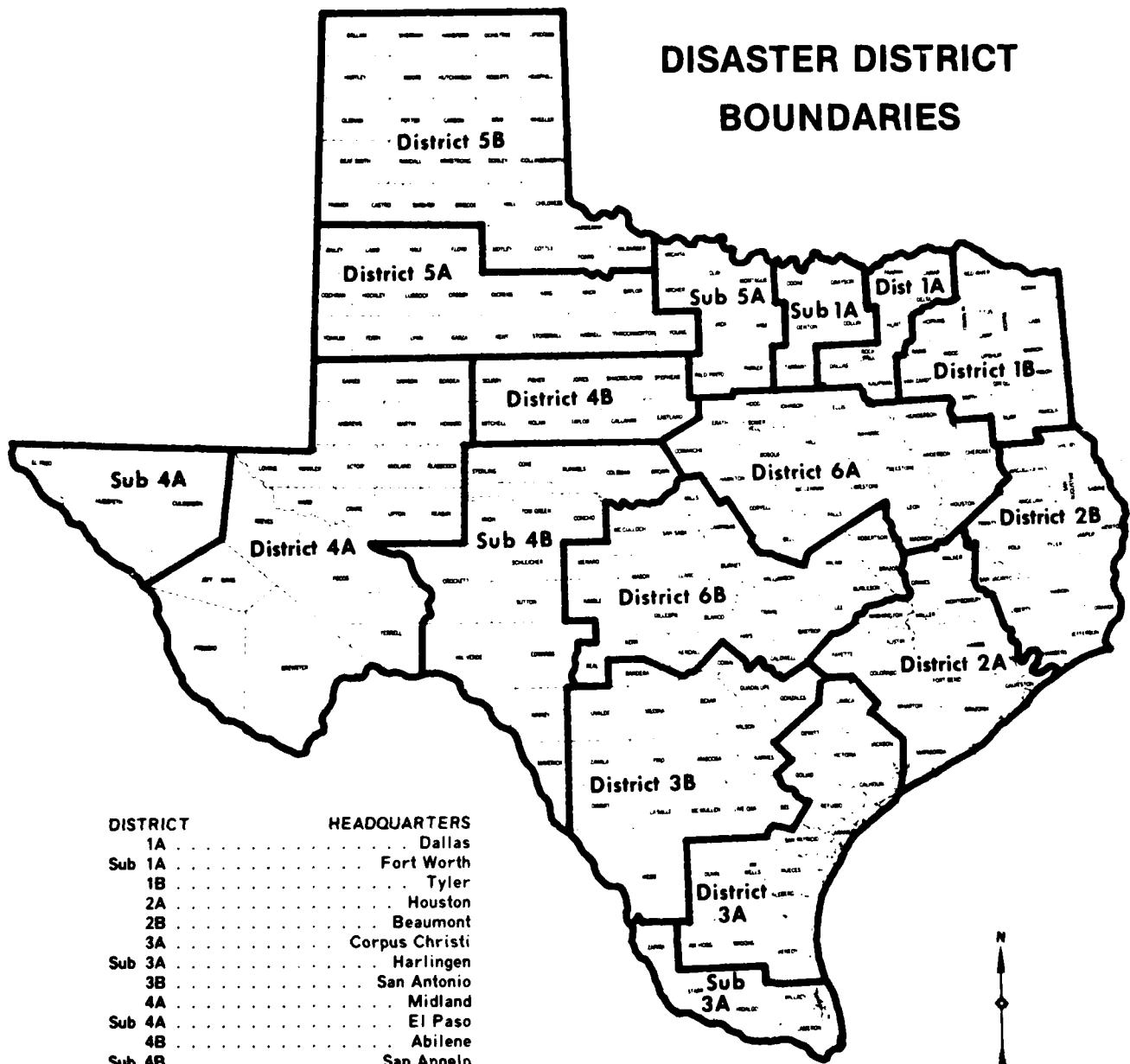
The management of resources in the best interest of citizens is primarily a local government responsibility and local plans should make provisions for proper coordination with industry and resource sources so that State and Federal intervention is not necessary. The management of resources during crisis relocation is essential in spite of the business as usual "insofar as possible" theme associated with planning. The stringency of conservation methods is not necessary to the extent required during postattack but due to some reduction in industrial output, measures are called

for to reduce consumption so that a balance between production and use of resources can be maintained.

The effectiveness of local planning will determine the extent of State as well as Federal involvement in local management procedures.

The use of the Increased Readiness Information System in its present form or in any envisioned modification would produce either insufficient data or would be too cumbersome for existing communications systems and personnel to handle. While the addition of communications for the Increased Readiness Information System would be prohibitive, the additional space in Emergency Operations Centers and underground facilities throughout the State would be even more prohibitive.

DISASTER DISTRICT BOUNDARIES



DISTRICT	HEADQUARTERS
1A	Dallas
Sub 1A	Fort Worth
1B	Tyler
2A	Houston
2B	Beaumont
3A	Corpus Christi
Sub 3A	Harlingen
3B	San Antonio
4A	Midland
Sub 4A	El Paso
4B	Abilene
Sub 4B	San Angelo
5A	Lubbock
Sub 5A	Wichita Falls
5B	Amarillo
6A	Waco
6B	Austin
State EOC	Austin

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Attachment 1

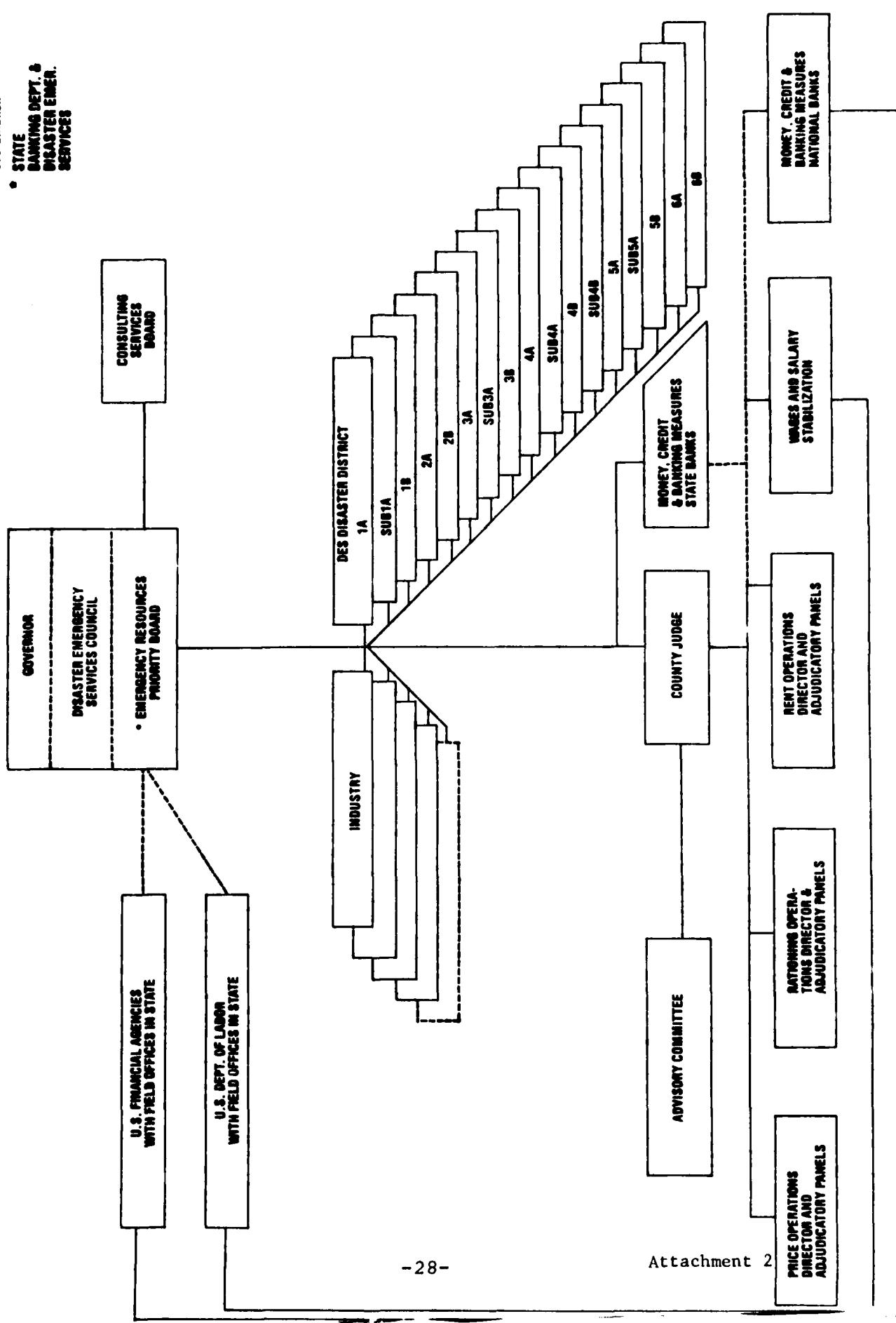
**STATE OF TEXAS
ECONOMIC STABILIZATION ORGANIZATION**

LEGEND

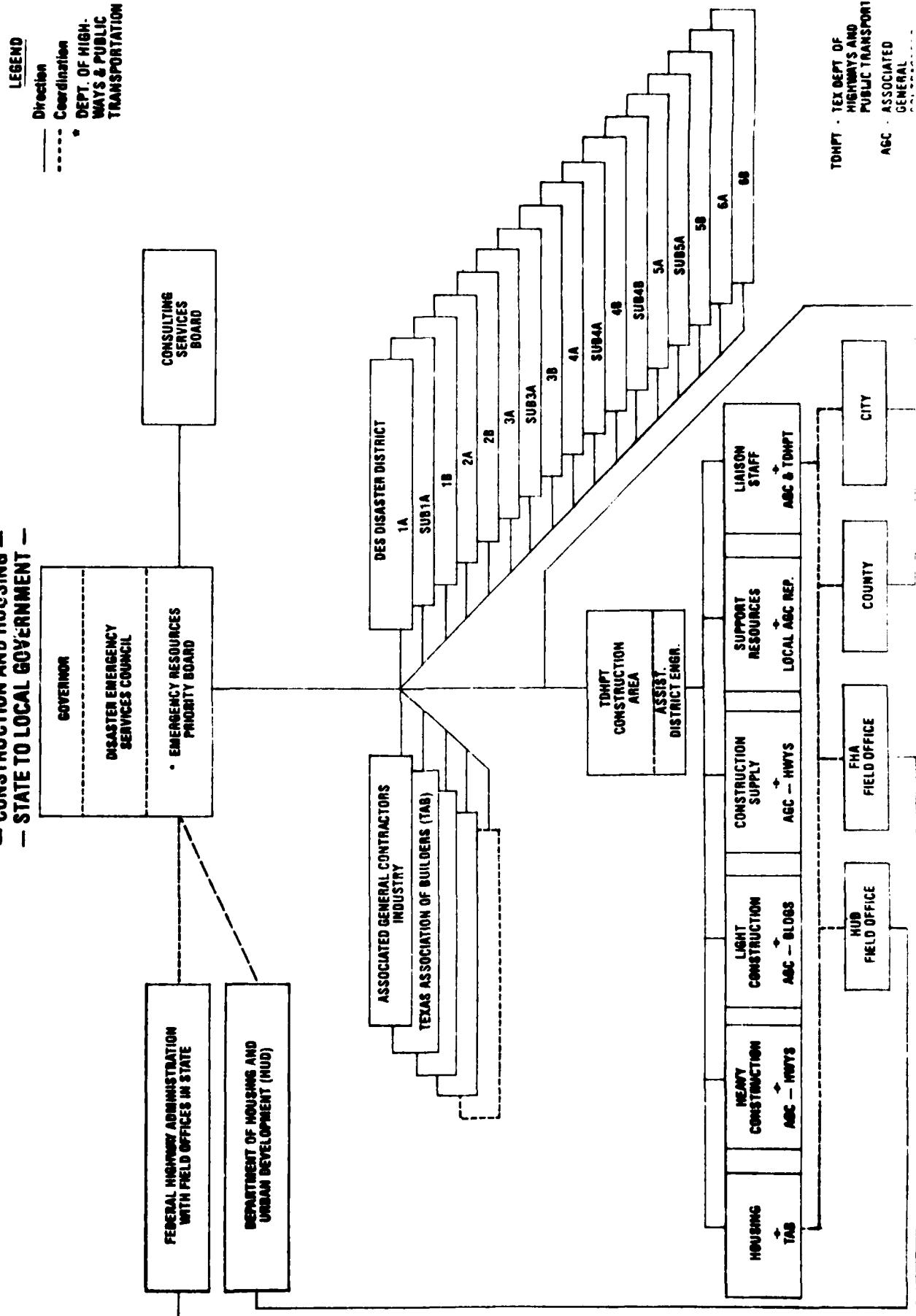
— Direction

----- Coordination

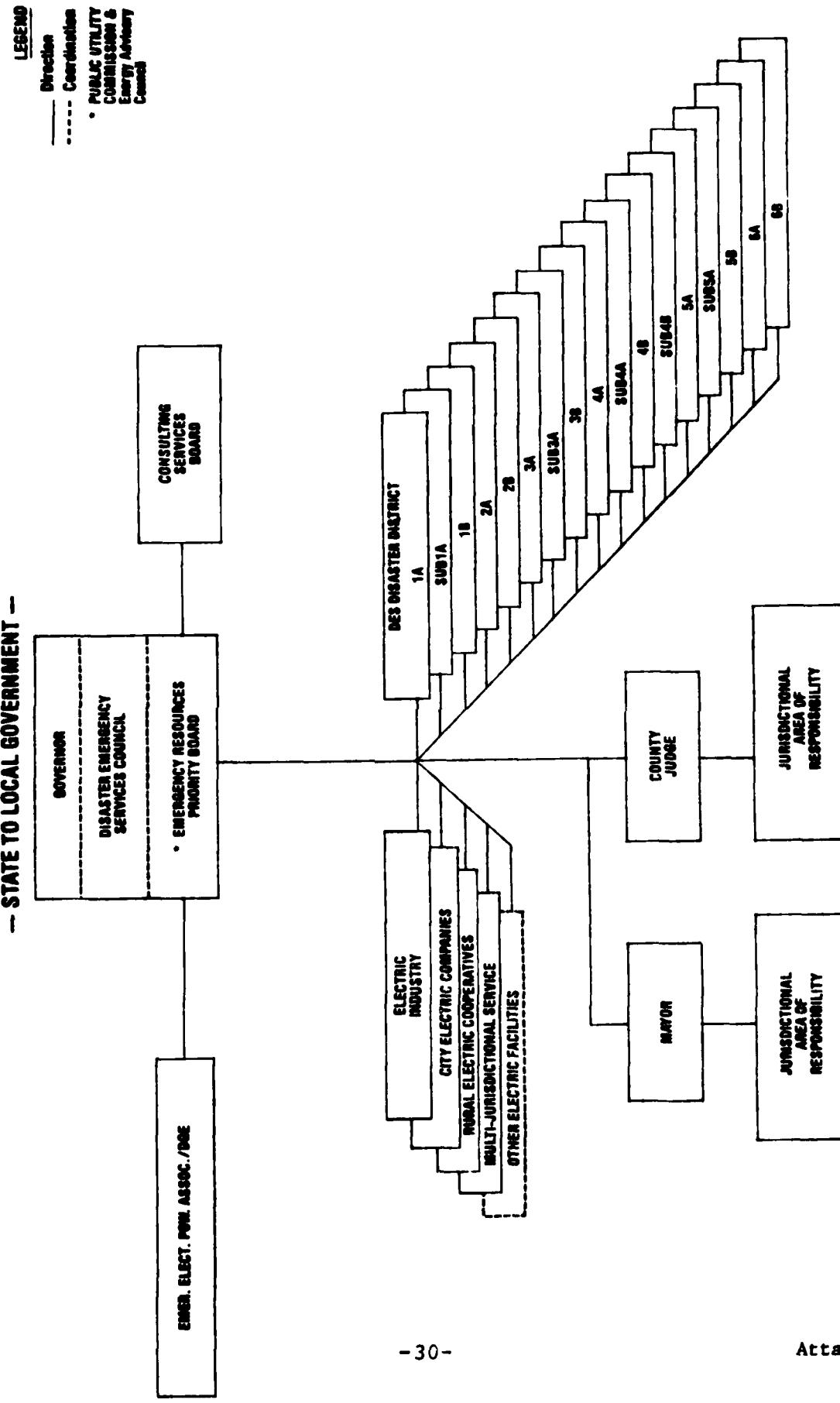
- STATE
BANKING DEPT. &
DISASTER EMERG.
SERVICES



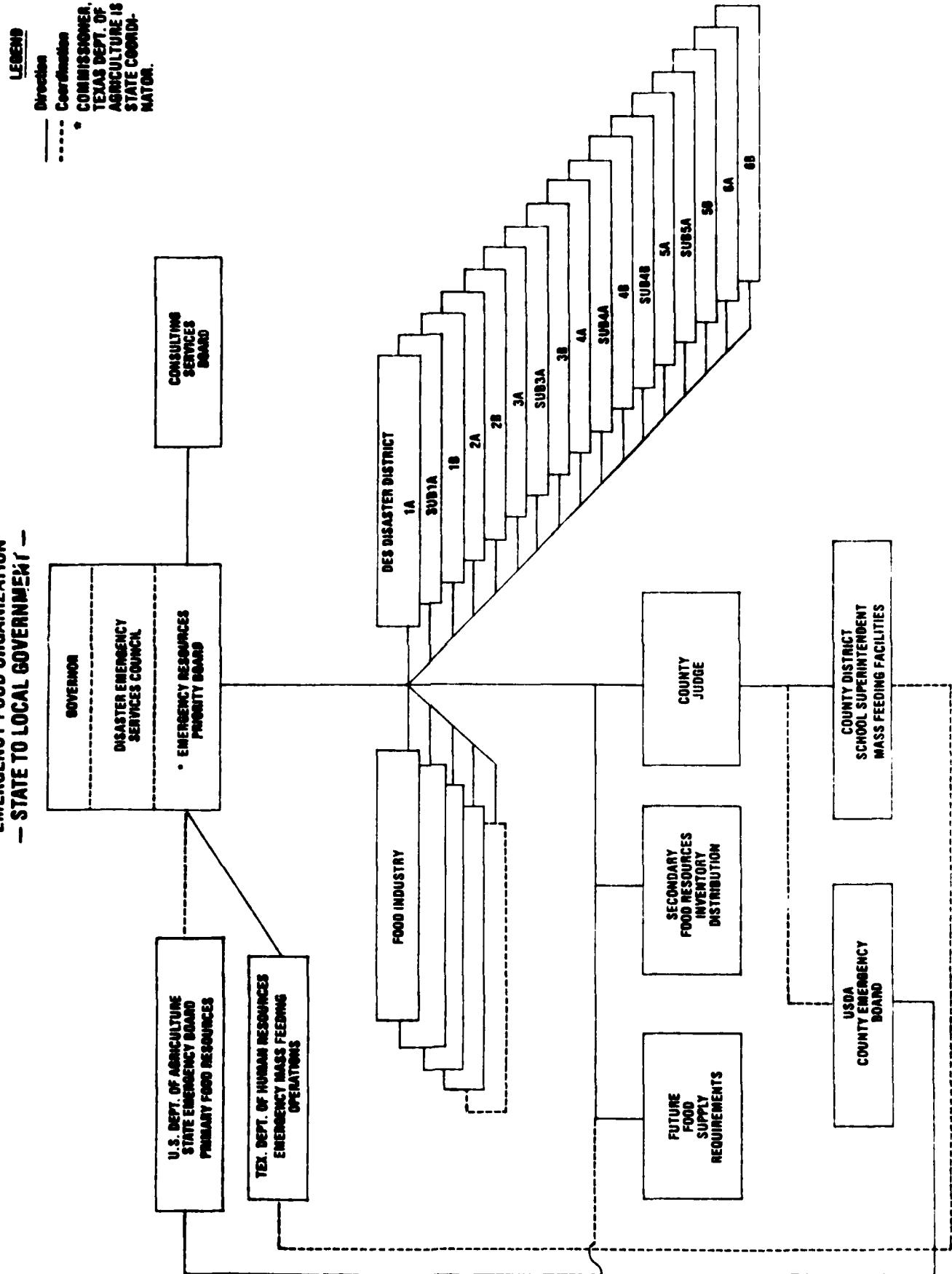
STATE OF TEXAS
EMERGENCY RESOURCES MANAGEMENT ORGANIZATION
— CONSTRUCTION AND HOUSING —
— STATE TO LOCAL GOVERNMENT —



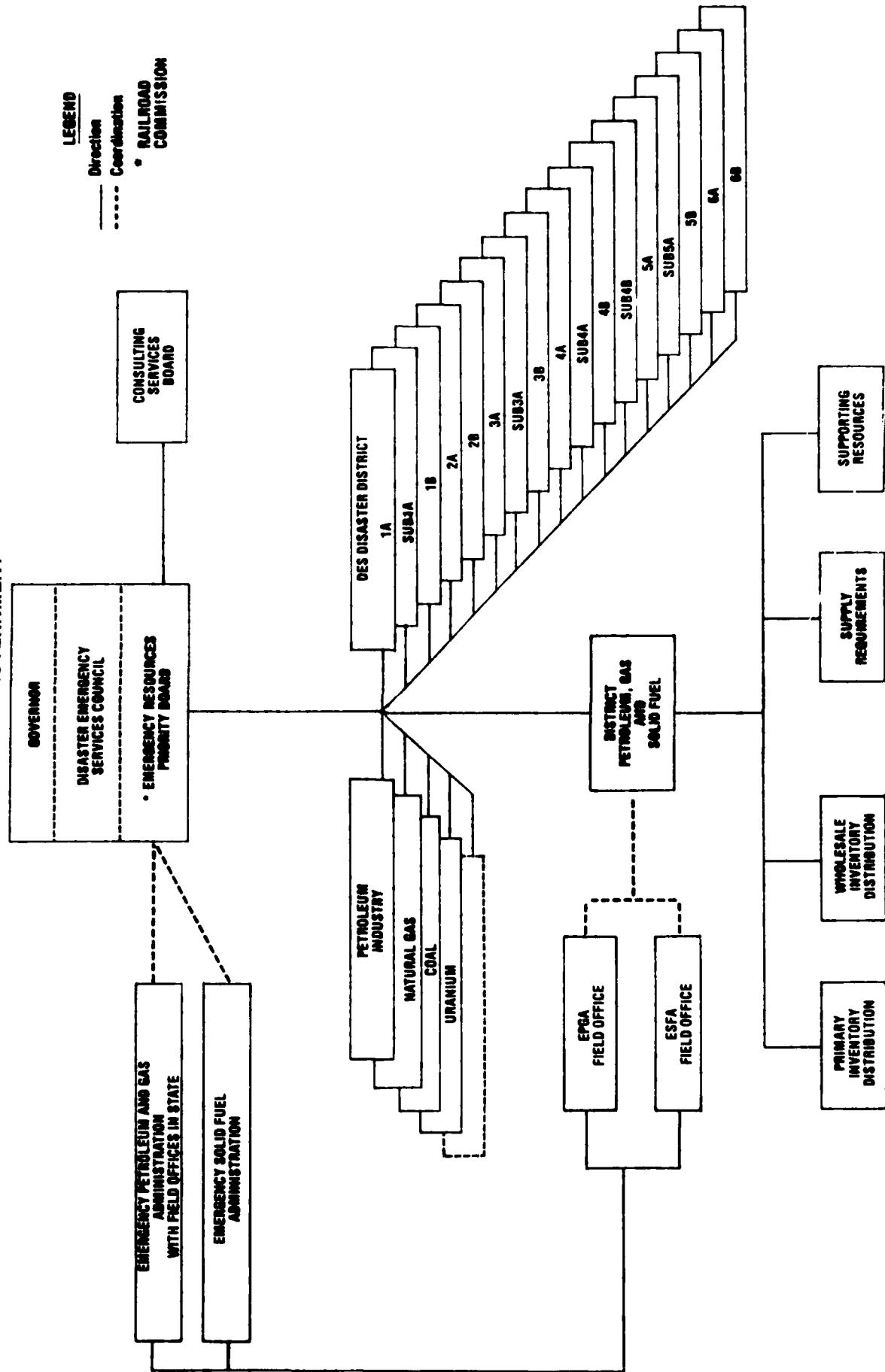
EMERGENCY RESOURCES MANAGEMENT ORGANIZATION
STATE OF TEXAS
— ELECTRIC POWER —
STATE TO LOCAL GOVERNMENT



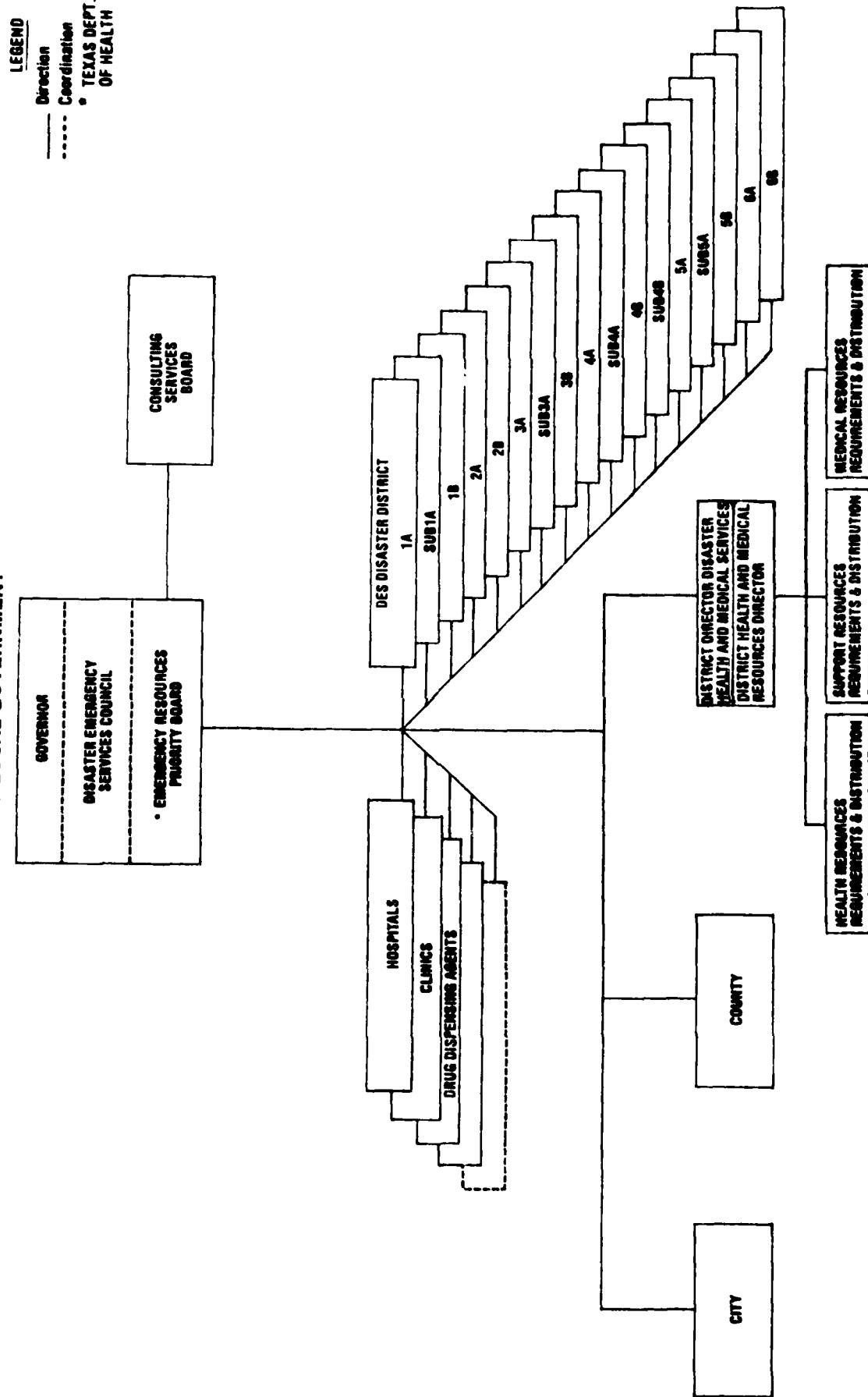
ANNEX A
STATE OF TEXAS
EMERGENCY FOOD ORGANIZATION
— STATE TO LOCAL GOVERNMENT —



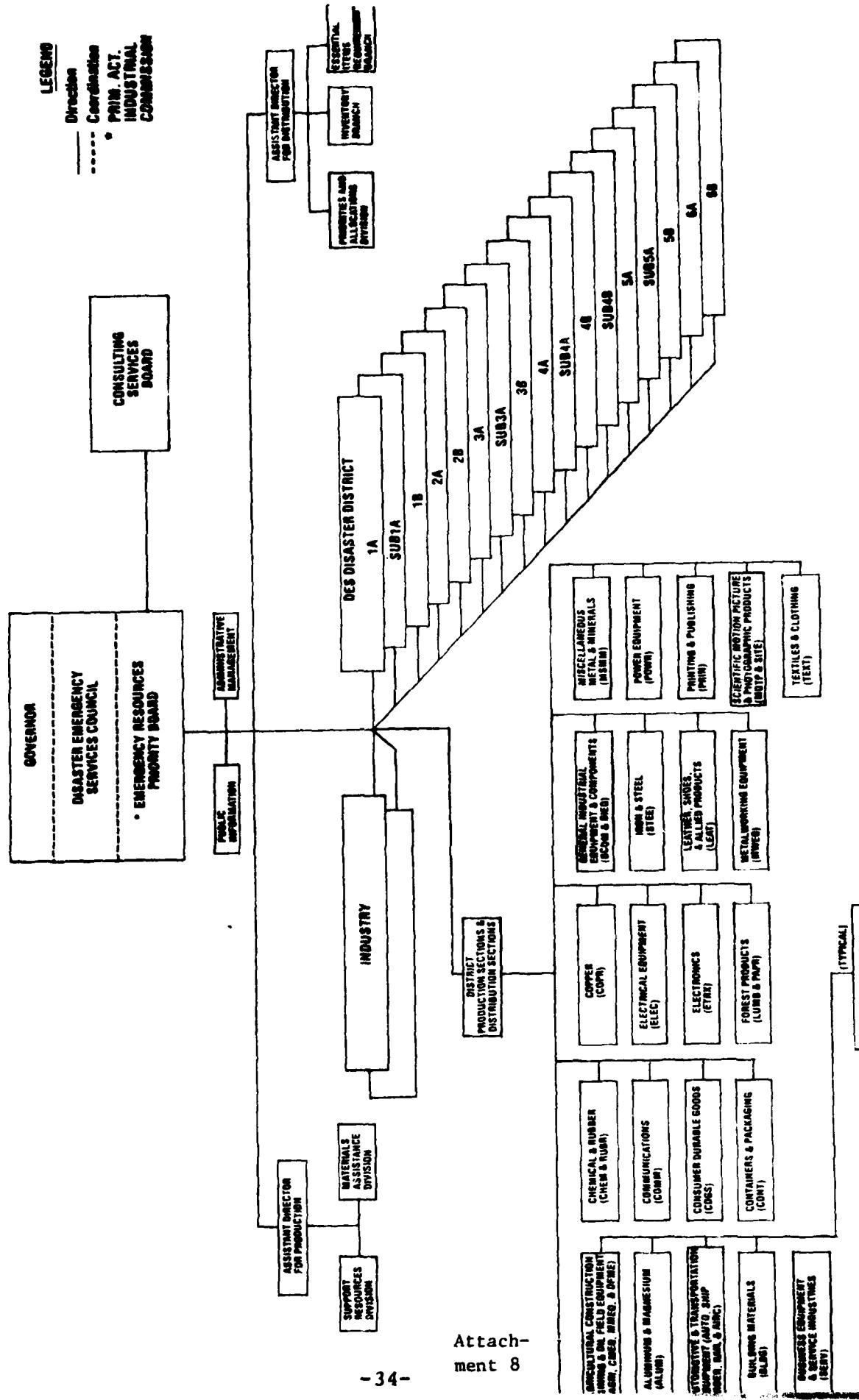
STATE OF TEXAS
EMERGENCY RESOURCES MANAGEMENT ORGANIZATION
—PETROLEUM, GAS AND SOLID FUEL—
—STATE TO LOCAL GOVERNMENT—



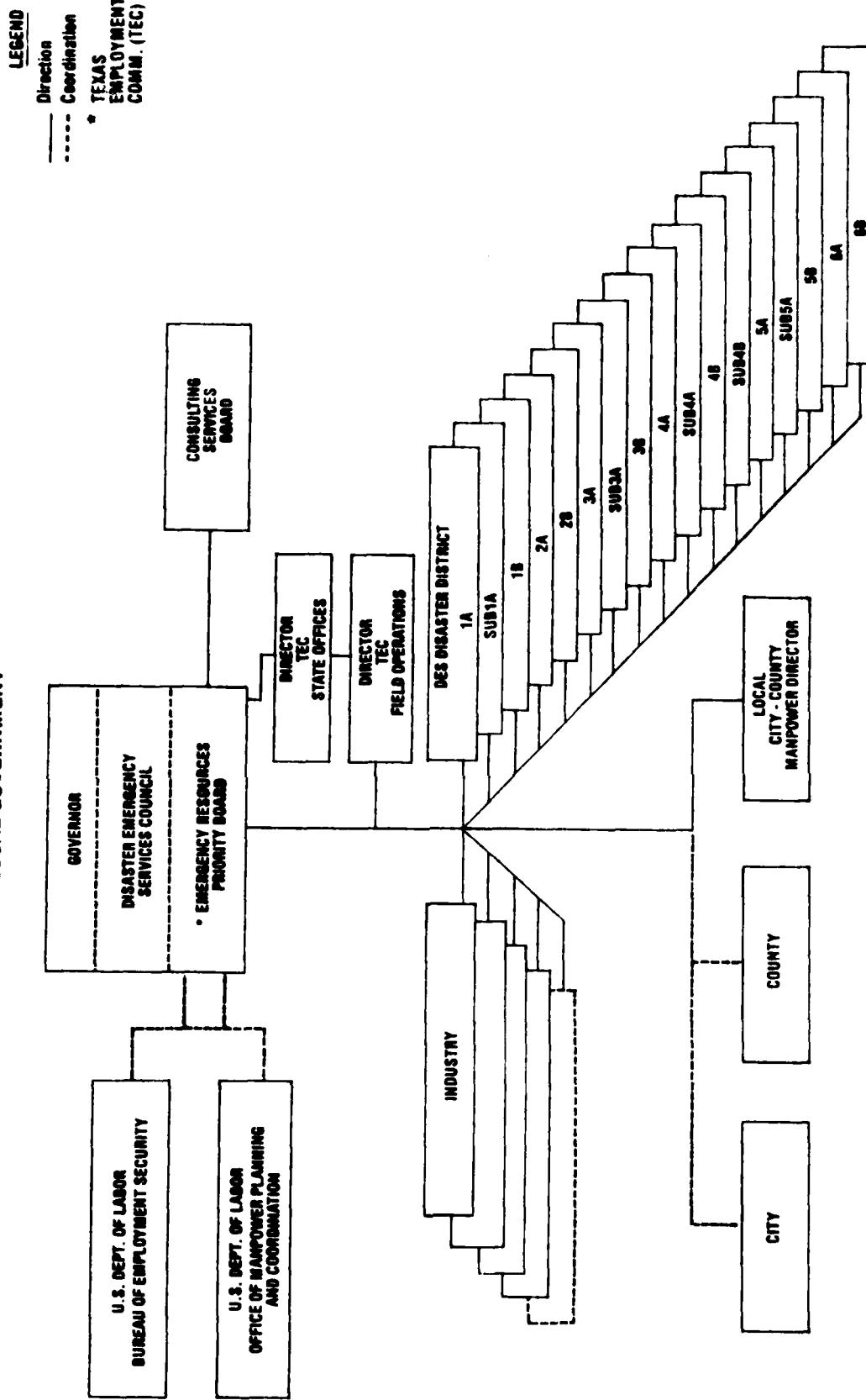
**STATE OF TEXAS
EMERGENCY RESOURCES MANAGEMENT ORGANIZATION
—HEALTH & MEDICAL—
—STATE TO LOCAL GOVERNMENT—**



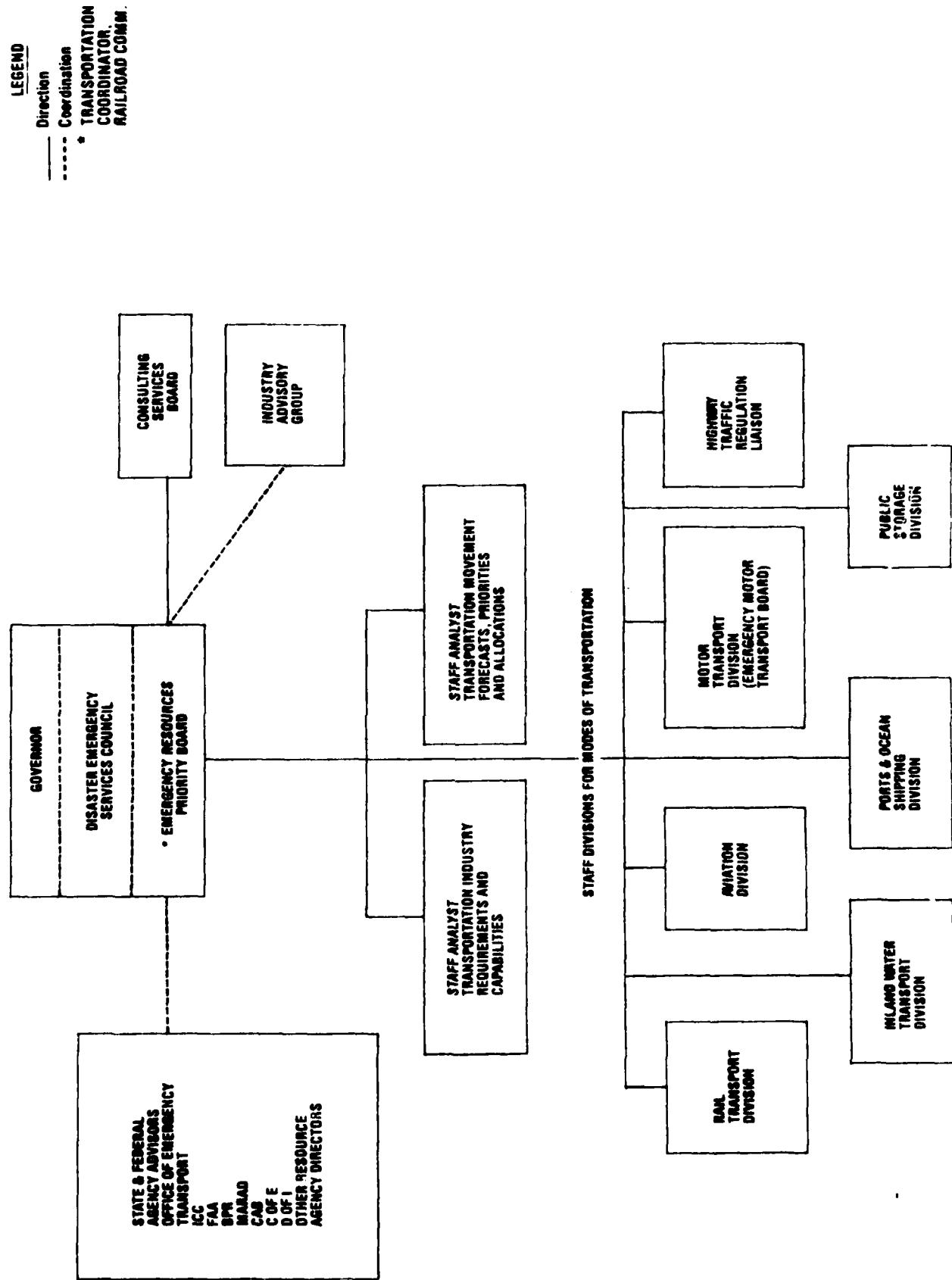
**STATE OF TEXAS
EMERGENCY RESOURCES MANAGEMENT ORGANIZATION
— INDUSTRIAL PRODUCTION —
— STATE TO LOCAL GOVERNMENT —**



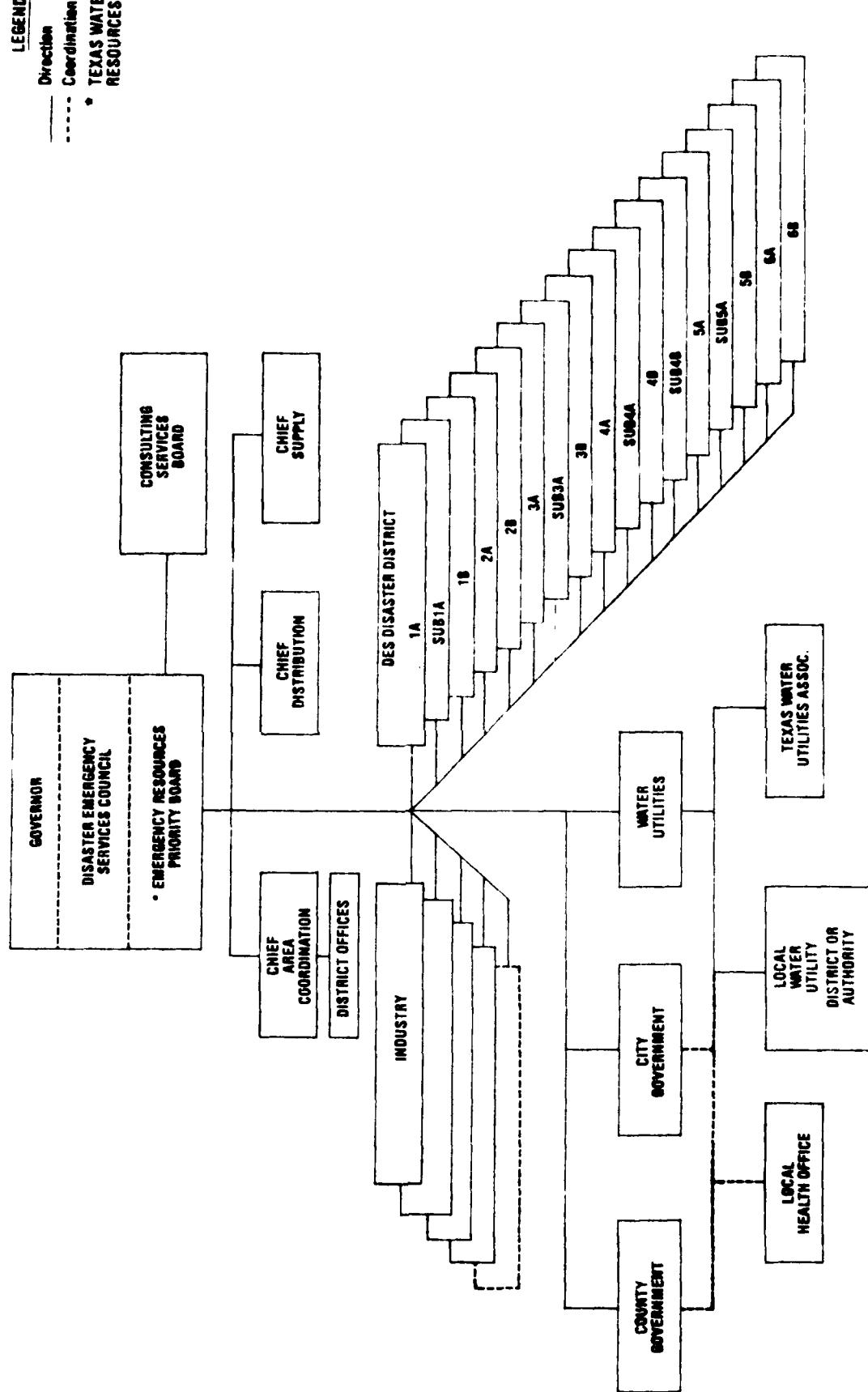
**STATE OF TEXAS
EMERGENCY RESOURCES MANAGEMENT ORGANIZATION
— MANPOWER —
— STATE TO LOCAL GOVERNMENT —**



STATE OF TEXAS
EMERGENCY RESOURCES MANAGEMENT ORGANIZATION—
—TRANSPORTATION—



STATE OF TEXAS
EMERGENCY RESOURCES MANAGEMENT ORGANIZATION
—WATER—
—STATE TO LOCAL GOVERNMENT—



CHAPTER 2

STATE AGENCY FUNCTIONAL ASSIGNMENTS

The chapter studies existing Texas State government and quasi-official agencies to determine if existing mission assignments relative to emergency resource management is appropriate; reassign, if necessary, missions to government organizations and agencies; influence acceptance of missions by appropriate organizations and agencies; encourage other agencies to participate in updating and revising the Texas Emergency Resource Management (TERM) Plan and developing a national model.

The State government structure was reviewed to ascertain what agencies and organizations still existed and what new agencies had been authorized since the 1966 publication date of the TERM Plan. This assisted in determining if any new agencies or older established ones were better suited by day-to-day mission to assume responsibility for management of a specific resource previously assigned to another agency. Some of the agencies considered were the Texas Energy Advisory Council, Public Utility Commission, and the Banking Department. These agencies seemed better suited to assume a resource management responsibility especially the Public Utility Commission for electric power and the Banking Department for the monetary, banking, and credit portion of economic stabilization.

To discuss mission responsibility assignments, a meeting of the State Disaster Emergency Services (DES) Council was scheduled with all members being invited to attend (see Attachment 1 showing membership of the DES Council). Some Disaster Emergency Services Council members had been previously assigned primary responsibility for management of a specific resource while other members had only supporting or no responsibility assignments (see Attachment 1 showing primary and supporting resource management responsibilities). In addition to Disaster Emergency Services Council members, three (3) non-member agencies mentioned in paragraph two (Energy Advisory Council, Public Utility Commission, and Banking Department) were invited to attend the meeting. Since the Energy Advisory Council and Public Utility Commission did not exist when the TERM Plan was published in 1966, it was necessary to have their expertise for the rewrite of the plan. Action has been taken through the Governor's Office for issuance of an executive order adding the Public Utility Commission to the membership of the Disaster Emergency Services Council. The Banking Department would act in a primary role under economic stabilization.

At the meeting of the Disaster Emergency Services Council, a general briefing of emergency resource management planning was conducted. Included was crisis relocation, its

affect on resource management and the objective of the original TERM Plan. Since the TERM Plan concentrated in its present form exclusively on resource management after a nuclear attack, this concept was to be retained in the model development and expanded to involve crisis relocation planning and its effect on resource management. At the conclusion of the meeting, State agencies were tasked to review the TERM Plan as it applied their agency and provide pertinent revisions and update material to us for consolidation.

The assignment of responsibility to those members of the Disaster Emergency Services Council who had prior responsibility for specific resources did not create a problem. The mission of these particular member agencies had not changed hence they were still the best suited to continue as responsible agencies for the assigned resource. Some problems were experienced in three specific resource areas. They were:

Economic Stabilization

Electric Power

Housing

The first two--Economic Stabilization and Electric Power--had been assigned to non-State government agencies. As the decision had been made to assign resource management responsibilities under the authority of State government agencies,

a search of the State government structure as described in paragraph two revealed the fact that the Finance Commission and Public Utility Commission were best suited to assume responsibilities under these two areas respectively. The task of convincing these agencies began with an exchange of correspondence. This was quickly expanded to include telephone contacts and finally direct personal contacts were made. This approach covered several months.

The result was agreement by these agencies that they were best suited by mission assignment and that the best interests of the State could be served if they "joined the team." We now have their full cooperation and look forward to their continued assistance in Texas emergency resources management planning activities.

Housing had been assigned to a Disaster Emergency Services Council member but there were some doubts and opinions expressed by Disaster Emergency Services staff members as to whether it was the correct agency or not. After some internal coordination and discussions, it was finally agreed and accepted by the original agency that housing was assigned to the correct agency and will remain there.

In summary, the task of evaluating the existing State government to determine the appropriateness of existing

missions relative to emergency resource management; re-assign, if necessary, responsibilities to government organizations and agencies; influence acceptance of responsibilities by appropriate agencies; encourage other agency participation in revising the TERM Plan was accomplished. The end result was that all agencies with emergency resource management responsibilities are members of the Disaster Emergency Services Council or will be so designated by executive order in the near future. (This executive order was signed by the Governor and published as WPC-11, on August 15, 1979.)

R-Railroad
V-Motor Vehicle
I-Inland Waterway
A-Air Transport Services

B-Monetary, Banking and Consumer Credit W-Wage and Salary Stabilization T-Price, Consumer Rationing and Rent Control

B-Monetary, Banking and Consumer Credit	R-Railroad
W-Wage and Salary Stabilization	V-Motor Vehicle
T-Price, Consumer Rationing and Rent Control	I-Inland Waterways
	A-Air Transport Services

Attachment 1
Page 3 of 3

CHAPTER 3

STUDY OF OTHER STATES' PROBLEMS IN EMERGENCY RESOURCES MANAGEMENT PLANNING

The many unknown and ever changing situations make it difficult, if not impossible, to plan precisely for the future. And so it is with Emergency Resources Management (ERM) planning because it attempts to deal with the future environment. It necessarily follows that the task of good ERM planning requires keen foresight, expert knowledge of areas involved in the plan, and flexibility to adjust strategies where needed.

QUESTIONNAIRE

To enhance our foresight and increase our flexibility of planning, a questionnaire was prepared and sent to various states for their response. The purpose of the questionnaire was to elicit problems being encountered in the different states and their possible solutions. In this way we could benefit from the foresight of others, broaden our horizons and make our model plan more compatible with other states' situations.

Nine states were selected to participate in the questionnaire. They are as follows: Alabama, Arizona, Georgia, Minnesota, North Carolina, Pennsylvania, Tennessee, Virginia, and Washington. As of this date, responses have been received from all except Minnesota and Washington.

CONSTRUCTION OF QUESTIONNAIRE

In order to develop a common thinking base point for the answers, a situation was presented at the beginning of the questionnaire. (See Attachment 1, example of questionnaire.)

The questions were divided into two parts. The first part was composed of general questions pertaining to the respondent's approach to ERM during crisis relocation. The second part was composed of questions in specific subject areas.

The questions were designed to provide maximum latitude. While specific points are touched upon, the questions allow for a wide range of subjects. In this way, we wanted to receive specific responses in addition to any discussion of problem areas as seen by the respondent.

ECONOMIC STABILIZATION

The first subject area of query in the questionnaire was economic stabilization. For emergency resources management planning purposes, DCPA's Guide for Crisis Relocation Contingency Planning gives these guidelines concerning economic stabilization: ". . . the provision of housing and other essentials, including food and medical care, is likely to be at the expense of the government for relocated families and many host area families as well." In addition, DCPA states, ". . . planning will be based on the assumption that no one will be denied the necessities of life through inability

to pay and that the continuity of businesses and other institutions will be protected."

Herein lie the problems. How do we, as planners, ensure the equitable distribution of essentials? Arizona feels that the determination of ability to pay is impossible in a crisis situation. Arizona also states that a money economy during crisis relocation is an impossibility for the host government. Since every non-residential structure capable of accommodating people will be filled to capacity as a congregate care facility, Arizona feels that "business as usual" is not possible and, therefore, the need for money is virtually nil. Virginia feels that the large number of people with no income or access to their bank accounts will present a problem.

We, in Texas, have faced similar problems. Since economics is not enclosed by State boundaries, it is difficult to formulate plans concerning management of economics with the general, noncommittal guidelines presented by the Federal government. Since banks respond to Federal regulations through the Federal Reserve System and banking activity will directly affect economic stabilization activities, it is obvious that Federal guidance is essential if economic stabilization is to be properly handled.

Therefore, what is the Federal Reserve System's plan in the event of implementation of crisis relocation? There has been

no Federal guidance in this area. In addition, DCPA's use of words in their guidelines such as "likely" or "undoubtedly", and phrases such as "can be said" does not elicit confidence that all is well in this area.

In Texas, we have explored the economic stabilization problem with the Texas Banking Department. A couple of points of interest were discovered and these need to be addressed.

The first point is public confidence. At the time crisis relocation is implemented, the consensus is that a great number of people will make a run on the banks to withdraw their money. To prevent a run, the banks could opt to have a two-day moratorium or limit withdrawals to an amount that cash on hand could handle. Both actions, while preventing a depletion of banks' cash, could deteriorate public confidence, cause chaos and possibly incite violence. What can be done to alleviate this "Catch 22" situation? Arizona has resolved their problem by planning for a no-money economy during crisis relocation. They have incorporated two types of ration cards in their plan. The first type would be for residents in host and risk areas who are preparing meals at home. The other type would be for relocatees who would be utilizing congregate care facilities.

Another point was for a no-money economy. This would require a firm commitment from Federal government to accept all

financial responsibility. As of this time we have no such commitment. Should a no-money economy be adopted and the Federal government decides against accepting all the expenses incurred during crisis relocation, because of the precedence not assuming War Emergency Powers the State would be liable for all expenses. Therefore, until such time when there is a commitment from Federal government in regards to a no-money economy, we have decided to research other alternatives.

One of the alternatives explored with the Banking Department was the possibility of setting up bank field offices in the host areas with representatives of risk area banks to service all customers. Although branch banking is illegal in Texas, should this alternative be chosen, provisions would be made for special situations such as crisis relocation, in addition to provisions for an extensive public information program.

The information program would be used to inform and assure the public. The Banking Commission introduced the possibility of inserting information materials in the monthly bank statements. These materials would include information concerning duplicate bank records, the availability of money, and the availability of services should an emergency such as crisis relocation occur. Regardless of which alternative we adopt, a thorough and extensive public information system is imperative for the success of a plan.

It must be apparent that we do not yet have a solution to the problem of economic stabilization. There are many unanswered questions and unresolved problems. However, the Banking Department has agreed to research the problem further and get input from individual banks for possible solutions.

PRICES AND RENTS

As for stabilizing prices and rents, we have established plans for price and rent controls. This strategy has been adopted by all of the states responding. In addition, Tennessee plans to ration gasoline at the onset of relocation and impound personal vehicles after arrival at host areas.

Economic stabilization, as it stands now, is a difficult problem. Perhaps, we are making the problem more difficult than necessary. Alabama did not find economic stabilization a problem. They understand crisis relocation to be of a short term nature and don't anticipate problems. They do, however, have a backup plan for price and rent controls and consumer rationing. This is another possibility to be considered in planning. Hence the many requests for further clarification on the part of Federal government.

TRANSPORTATION

In the area of transportation, the states were asked to respond to specific questions in addition to any other comments they wished to make. The questions are as follows: What are some

anticipated problems, resulting from crisis relocation (or during crisis relocation) and how do you plan to cope with them in the following transportation areas:

- a. Collection, pickup and relocation of people into host areas?
- b. Movement of people back and forth from host areas and risk areas to continue operation of essential business and industry?
- c. Relocation of essential supplies and equipment from risk areas to host areas?

In response to the first question, the majority of the states were in agreement to the solution of the problem of collection, pickup and relocation of people. The concensus was to move the majority of the population (85-90%) by privately owned vehicles (POV). The remainder would be relocated by mass transit systems, to include commercial and school buses, trucks and in some cases, even railroads. The only problem here seems to be getting the location of the loading sites and departure schedules to those people who will be utilizing the mass transit system for relocation. The only solution, the most logical, brought to light was to conduct a massive public information campaign to inform the public of the loading sites and departing schedules.

The second question, that of moving key personnel back and forth from host to risk areas to operate essential businesses

and industries, elicited a more diverse response. The two most common solutions were (1) to utilize carpooling in private vehicles, augmented by mass transit where necessary, and (2) to utilize mass transit systems. Pennsylvania is exploring the possibility of retaining the key personnel in the risk areas and housing them in available blast shelters rather than attempting to commute them between host and risk areas. None of the states queried felt that the movement of key personnel would present a major problem.

The most diverse answers were in response to the question concerning the relocation of essential supplies and equipment from risk to host areas. However, several of the ideas involved variations of the same premise. That premise is to allow the private sector to continue its role as distributor. In Texas, although we do not yet have detailed plans, we have some conclusions from a study completed of the Fort Worth food distribution system. The study said, ". . . it was determined that the existing system could accomplish the distribution of both refrigerated and non-refrigerated food to host areas in both the Fort Worth conglomerate and other areas normally serviced by the Fort Worth food distribution system." The Fort Worth conglomerate consists of 27 host counties. This study seems to support the theory that the private sector can handle the problem of food distribution during a crisis.

In Pennsylvania, in the event a short notice is given for crisis relocation, the plans are to allow the private sector and local authorities to manage the redistribution of essentials. If more time is available for crisis relocation, they are exploring the possibility of constructing local facilities for storage and distribution, along with plans for a more centralized allocation system. In Texas, we feel that distribution centers would probably have to remain where they are presently located, with supplies being moved to host areas as time and space permits.

Virginia is studying the possibility of relocating the essentials just prior to the relocation of the population if given adequate notice. If, however, the notice is so short that transfer of essentials is not feasible before the relocation of the population, then the transfer would be made after relocation is completed. The rationale here is to ease the stress on the highways since transfer of essentials and relocation of the population cannot be accomplished at the same time. It would place too much stress on the highway system.

In Arizona, to ease the stress on the highway system, the emergency resources management planners have delegated the responsibility of transportation to the State Emergency Transportation Coordinator (SETCO). The SETCO would be responsible for the redirection of essentials from wholesalers to host areas.

Georgia has not resolved the problem of transferring essentials yet. The main obstacle in their planning is the identification of essential goods and quantities needed. The majority of states, including Texas, are in agreement that the identification of essentials is a major problem in the planning of the redirection of essentials to host areas. Other than that, there were no problems anticipated in this area.

ESSENTIAL SERVICES - HOST AREA

The questionnaire also addressed problems of planning for essential services in the host areas, to include electric power, petroleum and gas, construction and housing, food and water. Two states, North Carolina and Georgia, did not elaborate on problems in this area, stating that the problems were too numerous for discussion on the questionnaire.

Only one respondent, Tennessee, felt that electric power would pose a problem during crisis relocation. Since Tennessee obtains all electric power from the Tennessee Valley Authority (TVA), a Federal agency, their plans would necessitate close coordination with the TVA.

In the area of petroleum and gas, the states responding to this question did not feel it to be a major problem except during the relocation of the population. During relocation, gasoline would be rationed in most of the states responding. However, since some states, including Texas and Tennessee,

plan to impound private vehicles after relocation is completed, the need for gasoline is diminished considerably.

Construction and housing does not seem to pose a great problem. Virginia is concerned, however, of the ability of rural host areas to accommodate the relocatees. The solution here is a thorough evaluation of congregate shelters. In addition, there is concern over adequate fallout protection. Apparently, Virginia does not place much credence in the feasibility or practicality of building expedient shelters and upgrading existing buildings in accordance with DCPA guidance.

In Texas, we do not see a great need for new construction except in the building of expedient shelters. Since our host areas are capable of housing the relocatees, our plans do not call for much construction during crisis relocation.

The problems concerning food involve redistribution from risk areas to host areas. These problems were discussed previously in another section.

Problems anticipated with respect to water were brought out by Arizona. The major problems involved are the availability of potable water and adequate sewage facilities. To cope with these problems, Arizona has developed plans to conserve water and to reduce effluent. In order to manage the increase in effluent in some host areas, they have developed plans for

constructing temporary sewage lagoons which would be chemically treated and left to "crust" until after relocation is concluded. At that time, the lagooned sewage would be pumped through the treatment plants and the lagoons filled in.

Texas plans to deal with the water problem in a less elaborate manner. The availability of water and adequate sewage system is considered in the dispersing of relocatees into a host county to prevent such problems. These considerations are then incorporated in the relocation plans.

Although Tennessee does not see water as a problem in general, they view the availability of technicians to test water quality as a problem. They anticipate and are planning to meet the necessity of training technicians quickly during crisis relocation. In addition, they plan for the implementation of water conservation measures in all host areas.

A subject area not covered by the questionnaire, but nevertheless is of great importance, is the area of labor. Pennsylvania feels that this is a problem area and has entrusted their Department of Labor and Industry with the responsibility of allocating manpower resources on a priority basis to provide skilled and unskilled manpower to operate or perform essential services. Tennessee, as noted above, is planning for the training of technicians. In Texas, we plan to assign, on a prorated basis, medical personnel and equipment from the risk

area according to the proportion of relocatees going to a specific host area.

ESSENTIAL SERVICES - RISK AREA

The problems involved in providing essential services in the risk areas do not seem to present as great an obstacle as those in the host areas. Only Virginia and Arizona expressed concern in this area. Virginia feels that accomplishing mass printing and distribution of detailed emergency public information at the proper times and the completion of an orderly, phased movement of all vehicles within DCPA's time frame will present problems. In addition, Virginia feels the coordination of risk area resources to meet host area shortfalls and the identification of accessible blast shelters in the risk areas to accommodate essential workers, non-movable hospital patients, prisoners, mental patients, and "stay behinds" are also problems. The solution, though not stated by Virginia, seems to be careful and thorough planning in these areas.

Arizona sees a very significant problem in limiting access to the risk areas. To cope with this problem they have plans for activating their Emergency Highway Traffic Regulations to control access to the evacuated areas in addition to regulation of the evacuation traffic. In Texas, we have eliminated this problem by impounding all private vehicles after relocation. Another problem we anticipated in Texas is the education of the people remaining in the risk areas of the services available

and the locations, restrictions on mobility, curfews, and the requirement of assistance for upgrading of fallout shelters. This problem will be resolved by a thorough and continuing information program.

Fire protection and security for the risk areas is a problem for most of the responding states. There is a definite need for fire protection and security, but the resources for this protection will be scarce in a crisis situation. Although most of the respondents do not have detailed plans, they do have some ideas for providing these needed services. Alabama plans to assign firemen and policemen to remain or commute to the risk areas in accordance with local plans. Tennessee plans to retain 25% of their fire and police force in the risk area and redistribute them for better coverage. Virginia anticipates the use of volunteers and quasi-public service organizations to bolster their undermanned forces. Pennsylvania will allocate on a priority basis with considerations for the developing situations. North Carolina plans to maintain minimum essential services with personnel commuting on a shift basis. In Texas, several risk areas were surveyed and the consensus was that they needed all their resources to provide the necessary protection to the risk area. Therefore, no risk area fire or police support would be given to the host areas.

INDUSTRIAL PRODUCTION

The area of industrial production poses problems to only two of the states queried. Most of the states had identified the industries they deem to be essential. All others would be closed in accordance with local plans. They anticipated no major problems concerning industrial production.

On the other hand, Arizona and North Carolina have experienced some problems in this area. Arizona feels that the planning process does not utilize planning resources efficiently. They advocate concurrent planning of all phases, i.e. state, host area and risk area. In this manner, coordination is available during crucial stages of planning. North Carolina's problem is different from Arizona's, but one which has also been experienced in Texas. Their major concern in this area is the ability of essential industries to continue operations. This involves the availability of raw materials on hand, labor, and need for the product. Their solution was to relegate this responsibility to the local governments. In Texas, the identification of essential industries is also left to the discretion of the local governments. However, the ability to continue operations depends on the availability of raw materials. This could be an area of concern when State lines are crossed. Since interstate commerce requires coordination between states, in conjunction with the Federal government, it seems the Federal government has the most expertise and resources for

this particular area. Therefore, it seems only logical that the states look to Federal government for more leadership and support.

CONCLUSIONS

In reviewing the information gathered through the questionnaire, it is evident that although the states have encountered numerous problems in crisis relocation planning, many were resolved or can be resolved by careful and pertinent planning. The movement of people out of the risk areas and the problems associated with the provision of essential services in the host and risk areas, for the most part, have been resolved. The movement of key personnel back and forth from host areas to risk areas, the relocation of essential goods and equipment, and the identification of essential industries pose more complicated problems, but the majority of states have some ideas for resolving these problems.

However, there is one problem which cannot be resolved by the states. That problem is Federal guidance. Among the seven responding states, four cited the lack of Federal guidance as a problem. Alabama and Arizona state that more Federal support is required to accentuate the seriousness of emergency resources management planning and to resolve the Federal-state relationship in crisis relocation. Georgia and Virginia point out that Federal guidance is required to provide interface with individual state plans. Georgia probably encapsulates the problem by saying,

"The continuum of requirements for emergency response dictates closer coordination and continuity by the Federal government. Until this is accomplished, all states are fumbling with their respective interpretations of Federal guidance. The difference becomes most apparent at state borders."

We, in Texas, agree that more Federal guidance is needed, especially in the areas of economic stabilization, transportation of essential supplies (food, medical supplies, etc.), and industrial production because of the interstate nature of these areas. Economic stabilization is of special importance because it deals with economics. Without Federal guidance and coordination, it would be extremely difficult for states utilizing a money economy to do business with states utilizing a no-money economy. For example, if an Arizona buyer (no-money economy) must purchase goods from a Texas Seller (money economy), there could be problems when the Texas seller asks for payment. In this instance, Federal guidance could alleviate misunderstandings through coordination between states. However, the problem could have been avoided initially by the Federal government stipulating the type of economic base to be used during crisis relocation.

The concern over the transportation of essential supplies revolves around the availability of resources from producing

states to nonproducing states. For example, since Texas does not have any pharmaceutical manufacturers, there is a real need for assurance that drugs and other pharmaceuticals will be available, in the event that normal means are unavailable.

Tying in with the concern over the transportation of essential supplies from producing to nonproducing states is the industrial production of these essential supplies. North Carolina points out that their major problems in this area is the availability of raw materials and the determination of the need for the product. It is imperative that producing states are knowledgeable of other states' needs in order to properly plan for maintaining operations of essential industries. Federal coordination is necessary to provide information where it is needed.

To quote John Donne,

"no man is an Island, intire of it selfe;
Every man is a peece of the Continent,
A part of the maine; . . ."

In this case, no state is an island entire of itself. What one state does affects another. It is the job of Federal government to act as a bridge to span the gaps between the states, open lines of communication, and provide continuity throughout the Nation.

EMERGENCY RESOURCES
MANAGEMENT QUESTIONNAIRE

I. Situation:

- A. The current concept of time for emergency resource management (ERM) implementation is post attack which means war plus 10-40 days. This is considerably after the nuclear devices have stopped detonating, fallout radiation has subsided to an acceptable living level and surviving people have gone back to their homes.
- B. We believe this is late for proper conservation of critical resources and that the management of certain resources should commence as soon as the President acknowledges an international threat to our country:
 - 1. And, crisis relocation is implemented;
 - 2. Or, in the absence of time for crisis relocation, the implementation of resource management as soon as the President acknowledges a threat to our country and in-place shelter is advised;
 - 3. Or, in the event of a widespread major natural disaster which threatens the lives of significant numbers of people.
- C. An additional concept of the Federal government is to allow resources to manage themselves until there is a problem which demands attention, i.e., interstate shipping or transportation demands are not being met. The belief is that normal supply and demand actions will take care of most, and possibly all, problems, allowing resource control to stay with industry and local governments throughout the crisis negating the need for Federal government controls for an extended period of time beyond the disaster situation.
- D. If the accepted best situation is to leave ERM to local government and industry, it necessarily follows that local governments should develop and promulgate, to industry, their plans for resource management during crisis relocation (CR), community or in-place shelter (CS) and natural disaster situations. State governments should monitor actions of their counties and cities and assist as necessary to insure proper distribution of resources.

In view of the above considerations, please help us by commenting on the following items:

II. General Questions:

- A. Does your state concur in the basic situation shown in I.A. above?
- B. Has your state adopted the DCPA concept of Nuclear Civil Protection planning and, if so, has a basic state CR plan been developed?
- C. Is crisis relocation planned for your state's risk areas?
- D. If answer to "C" is yes, what changes, if any, would be required in your current state level organization should you choose to implement emergency management or resources at the outset of crisis relocation?
- E. Should you choose not to implement ERM at the outset of CR, how would a determination later be made that ERM has become necessary and how would ERM be implemented?

III. Subject Areas and Questions:

- A. Economic stabilization - Price controls, consumer rationing, and rent controls:
 1. What state agency monitors these responsibilities?
 2. What are some anticipated economic stabilization problems resulting from CR (or during CR) and how do you plan to cope with them?
- B. Transportation in support of crisis relocation:
 1. What state agency monitors these responsibilities?
 2. What are some anticipated problems resulting from CR (or during CR) and how do you plan to cope with them in the following transportation areas:
 - a. Collection, pickup and relocation of people into host areas?
 - b. Movement of people back and forth from host areas and risk areas to continue operation of essential business and industry?
 - c. Relocation of essential supplies and equipment from risk areas to host areas?

C. Certain essential services in host areas:

1. What state agency(ies) monitor(s) responsibility for:
 - a. Electrical power
 - b. Petroleum and gas
 - c. Construction and housing
 - d. Food
 - e. Water
2. What are some anticipated problems resulting from CR (or during CR) and how do you plan to cope with them?

D. Certain essential services in risk areas:

1. What state agency(ies) monitors responsibility for:
 - a. Electrical power
 - b. Petroleum and gas
 - c. Food
2. What are some anticipated problems resulting from CR (or during CR) and how do you plan to cope with them?
3. Do you anticipate problems with fire protection and security? If so, how do you plan to cope with them?

E. Industrial production:

1. What state agency monitors industrial production?
2. What are some of your anticipated problems and recommended ways of coping with them in this area, i.e., determination of businesses and industries which will continue to operate during crisis relocation, closing of non-essential business and industry, etc.?

F. Any general comments pertaining to emergency management of resources during crisis relocation, recovering from a nuclear strike or a major natural disaster would be appreciated.

CHAPTER 4

LIAISON WITH INDUSTRY

Resources are the elements which move, operate, provide nourishment, comfort or assistance in general to people and specifically in this instance for disaster preparedness, mitigation, response and recovery. Industry produces, moves and distributes these resources on a supply and demand basis and production of these resources is basic to the entire economy operations.

It necessarily follows that industry response to changing or shifting demands for supplies is directly related to information obtained to guide their processes.

As a result, industry would sense the change in demand shift from risk to host areas and would alter their distribution patterns as well as their supply priorities to meet this change. However, without prior warning so that planning can be done in advance, the response time to shift distribution patterns will be excessive in most areas. As a result, liaison with industry to coordinate crisis relocation information is essential if timely shifts in distribution patterns at the outset of population dispersal are to be realized.

Our approach to this element, as well as with others herein, was to research through appropriate documents and the State

agency primarily responsible for carrying out this aspect of emergency resource management planning. Our Division having the coordinating role it has with State government more or less demands that we take this approach. In this case, the State agency most closely aligned with industry production is the Texas Industrial Commission.

Since Texas is an industrially growing sunbelt State, there is a great deal of interest in industrial aspects of the State and intrastate communications through chambers of commerce, through university channels and through State and local government channels which continually collect information concerning the many businesses throughout Texas.

The Texas Industrial Commission has access to all the 278,000 economical entities which are compiled in a computer list and constantly updated with name of business, address, principal person's name and telephone number, item being manufactured or handled, and Standard Industrial Classification (SIC) numbers and so forth. The list is arranged by city, county, SIC number and alphabetically by company name. (See Attachment 1, sample sheet from Dun and Bradstreet Report Generator.)

The major or essential industry SIC numbers and product names are identified insofar as possible and are included as Attachment 2. Since all industrial entries are computer listed, changes according to necessities at the time can be made quickly

by the Resources Priority Board. Additionally, desired resources may be equally efficiently converted to SIC number and listed according to specific geographical area(s). This is especially true during the crisis relocation mode when inanimate objects are still standing and electrical as well as communications lines are intact and computer resources are available.

Meeting with the transportation, electrical and water industry officials revealed a great deal of interest in crisis relocation and the emergency management of their resources. Also, there was a keen interest in generating their own plans and a great percentage of the electric companies were not aware of local government planning in crisis relocation, this was partly because of the high level of the officials participating. However, electric companies were given information about local government responsibilities to their electorate as well as the mechanics of community planning and operational processes associated with being an elected local official. In addition, they were given names of public officials to contact and plans were made to assure that their companies were included in community plans.

Conclusion:

The liaison of State Resources Priority Board members and industry officials is an all important relationship which is essential to coordinated public service to the people of Texas. This relationship at State level is developed to the extent that all industry related entities are recorded and updated

periodically. This is adequate for State level preparation at this point in the disaster cycle. However, local planning actions should include more direct and comprehensive coordination with essential support industry. That is not to say that at State level coordination of crisis relocation information with major industry should not be done; for, if it is, local coordination most probably would be enhanced.

D U N & B R A D S T R E E T R E P O R T G E N E R A T O R

05/04/79

NAME OF BUSINESS: BOISE CASCADE CORPORATION

SECONDARY NAME: BOISE CASCADE CONTAINERS

ADDRESS: 11160 DENTON DRIVE
DALLAS, TX 75229

PRINCIPAL OFFICE & TITLE: DEAN C. TREADWAY

PHONE: (214) 247-9691

DMI LINE OF BUSINESS: MANUFACTURERS

YEAR STARTED: N.A.

SUBSIDIARY INDICATOR: NOT A SUBSIDIARY

MULTI-UNIT INDICATOR: BRANCH LOCATION

HEADQUARTERS DUN'S NO.: 009073099

HEADQUARTERS LOCATION: BOISE ID

AT THIS LOCATION: MANUFACTURING IS DONE

COUNTY CODE STATE CODE CITY CODE

267 85 2153

DUN'S NUMBER: 009096470

DUN & BRADSTREET
CREDIT RATING

ANNUAL SALES: UNAVAILABLE

NET WORTH: UNAVAILABLE

EMPLOYEES: 100

TOTAL EMPLOYEES: UNAVAILABLE

PRIMARY SIC: 2653

SECONDARY SIC:

D U N & B R A D S T R E E T R E P O R T G E N E R A T O R

05/04/79

NAME OF BUSINESS: PERMIAN MUD SERVICE, INC.

ADDRESS: P. O. BOX 4188
ODESSA, TX 79760

PRINCIPAL OFFICE & TITLE: SIDNEY S. LINDLEY

PHONE: (915) 337-2356

DMI LINE OF BUSINESS: CHEM OIL WELL SV

YEAR STARTED: 1946

SUBSIDIARY INDICATOR: NOT A SUBSIDIARY

MULTI-UNIT INDICATOR: SINGLE LOCATION

AT THIS LOCATION: MANUFACTURING IS DONE

COUNTY CODE	STATE CODE	CITY CODE
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300	85	6113
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DUN'S NUMBER: 007935257

DUN & BRADSTREET
CREDIT RATING

ANNUAL SALES: \$24,000,000

NET WORTH: UNAVAILABLE

EMPLOYEES: 300

TOTAL EMPLOYEES: 300

PRIMARY SIC: 2819

SECONDARY SIC: 1389 1311

D U N & B R A D S T R E E T R E P O R T G E N E R A T O R

05/04/79

NAME OF BUSINESS: GAF CORPORATION
SECONDARY NAME: BUILDING PRODUCTS DIVISION
ADDRESS: 2600 SINGLETON
DALLAS, TX 75212
PRINCIPAL OFFICE & TITLE: PETER HERBST
PHONE: (214) 637-1060
DMI LINE OF BUSINESS: MFR BUILDING
YEAR STARTED: N.A.
SUBSIDIARY INDICATOR: NOT A SUBSIDIARY
MULTI-UNIT INDICATOR: BRANCH LOCATION
HEADQUARTERS DUN'S NO.: 001294172
HEADQUARTERS LOCATION: NYC MANHATTAN NY
AT THIS LOCATION: MANUFACTURING IS DONE
COUNTY CODE STATE CODE CITY CODE
267 85 2153
DUN'S NUMBER: 044630895
DUN & BRADSTREET
CREDIT RATING
ANNUAL SALES: UNAVAILABLE
NET WORTH: UNAVAILABLE
EMPLOYEES: 300
TOTAL EMPLOYEES: UNAVAILABLE
PRIMARY SIC: 3272
SECONDARY SIC: 5023 5043

D U N & B R A D S T R E E T R E P O R T G E N E R A T O R

05/04/79

NAME OF BUSINESS: REICHHOLD CHEMICALS, INC.

ADDRESS: 1503 HADEN ROAD
HOUSTON, TX 77015

PRINCIPAL OFFICE & TITLE: DON LEVER

PHONE: (713) 453-5431

DMI LINE OF BUSINESS: MFG CHEMICALS

YEAR STARTED: N.A.

SUBSIDIARY INDICATOR: NOT A SUBSIDIARY

MULTI-UNIT INDICATOR: BRANCH LOCATION

HEADQUARTERS DUN'S NO.: 001220904

HEADQUARTERS LOCATION: WHITE PLAINS, NY

AT THIS LOCATION: MANUFACTURING IS DONE

COUNTY CODE	STATE CODE	CITY CODE
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399	85	3917
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DUN'S NUMBER: 008063398

DUN & BRADSTREET
CREDIT RATING

ANNUAL SALES: UNAVAILABLE

NET WORTH: UNAVAILABLE

EMPLOYEES: 100

TOTAL EMPLOYEES: UNAVAILABLE

PRIMARY SIC: 2821

SECONDARY SIC: 5161

**ESSENTIAL SURVIVAL ITEMS
FOR WHICH INDUSTRIAL PRODUCTION IS RESPONSIBLE**

<u>OIM Industry Division</u>	<u>Essential Survival Item</u>	<u>Code Numbers</u>
	Yellow fever vaccine	2834
	Dusting powder	2834
	Chemical reagents, stains and apparatus	2819
	Bacteriological culture media and apparatus	2831
	Nitrogenous fertilizers	2871
	Salt for livestock	2899
	Anthrax vaccine	2834
	Black leg vaccine	2834
	Hog cholera vaccine	2834
	Newcastle vaccine	2834
	Soaps, detergents, and disinfectants	2841, 2842
	Ferric chloride	2819
	Ferrous sulfate	2819
	Ferric sulfate	2819
	Hydrated lime	3274
	Soda ash	2812
	Iodine tablets	2862
	Chlorine compounds (not gas)	2819
	Activated carbon	2819
	DDT, water dispersible powder (75 percent)	2879
	Pyrethrum	2879
	Lye	2812
	Alcohol	2834
	Carbon dioxide absorbent	2834
	Cardiovascular depressants	2834
	Cardiovascular stimulants	2834
	Cortiosteroids	2834
	Diuretics	2834
	Intravenous solutions for replacement therapy	2831
	Local anesthetics	2834
	Lubricant, surgical	2834
	Sulfa drugs	2834
	Synthetic plasma volume expanders	2831
	Vitamin preparations, pediatric	2834
	Water for injection	2831
	Blood grouping and typing sera	2831
	Canned heat	2899
	Chlorinated copperas	2819
	Filter Alum	2819
	High-test hypochlorites (70 percent) in drums, cans, ampules	2819
	Liquid chlorine, including containers	2812
	Lindane powder, dusting (1 percent)	2879
	Malathion, liquid, emulsifiable concentrate (57 percent)	2879
	Deet (diethyltoluamide) 75 percent in denatured alcohol	2842
	Anticoagulant type, ready-mixed bait "1080" (sodium monofluoroacetate) (for controlled use only)	2842
	Glassware cleaning equipment	2818
Rubber (RUBR)	First aid items (included on Health Supplies and Equipment List)	2834
	Gloves, surgeon's	3069
	Tubing, rubber or plastic, and connectors	3069
	Waterproof outer garments	3069
	Nipples	2385
	Conveyor belting	3069
	Tires	3069
	Nursing bottles, all types	3011
	Lyster bags	3229
	Storage tanks, collapsible and portable	3069
	Water pipe and hose, plus fittings-all types, including fire hose	3069
		3079*
		3272*
		3292*
		3312*
		3317*
	Shoes and other footwear	3021
* OIM also lists these under CHEM, ELDG, MEMM, and STEE	Drain, Penrose	3069
COMMUNICATIONS (COMM)	Tube, nasogastric	3069
CONSTRUCTION INDUSTRY (CSTM)	None, Support to survival items	
CONSUMER DURABLE GOODS (CDGS)	None, Covered by another resource agency	
	Brush, scrub, surgical	3981
	Lamps, for diagnostic instruments	3641
	Lamps, for surgical lights	3641
	Razor and blades (for surgical preparation)	3421
	Laboratory glassware	3231
	Nursing bottles, all types	3229

	Pins	3964
	Cots	2511
	Heating and cooking stoves	3433
		3631
	Incandescent hand portable lighting equipment (including flashlights, lamps, batteries)	3642
	Kitchen, cooking, and eating utensils	3262
		3421
	Nonelectric lighting equipment	3642
	Refrigerators, mechanical	3632
	Hand sewing equipment	3964
	Basin, wash, solution	3461
	Insulators	3229
	Food containers	3221
	Storage tanks, rigid, transportable	3443
	Containers for sterilization	3461
	Blood collecting and dispensing containers	3221
	Blood shipping containers	2653
	Pressure containers and fittings for liquefied petroleum gas	3443
	Conductors (copper and/or aluminum, including bare cable for high voltage lines and insulated wire or cable for lower voltage distribution circuits)	3357
	Lamps (incandescent medium base) and lamp holders	3464
	Pole line hardware	3644
	Transformers, (distribution, transmission, and mobile)	3612
	Batteries, wet and dry cell	3692
	Conductors (copper and/or aluminum) including bare cable for high voltage lines and insulated wire or cable for lower voltage distribution circuits)	3357
	Switches and circuit breakers	3613
	Insulated trail cables	3357
	Trolley feeder wire	3357
	None at present. Items are anticipated to be placed under this industry in the future	
	None. Covered by another resource agency	
	Matches	3983
	Poles and crossarms	2411
	Storage tanks, wood stave, knock-down	2499
	Lumber and allied products:	
	Rough Lumber	2421
	Dressed lumber inc. siding, ceiling	2421
	Other lumber, inc. soft flooring	2421
	Hardwood flooring	2426
	Plywood	2432
	Millwork:	
	Windows	2431
	Doors	2431
	Other Millwork	2431
	Sanitary napkins	2649
	Toilet tissue	2647
	Disposable tissues	2647
	Building papers	2661
	GENERAL INDUSTRIAL EQUIPMENT AND COMPONENTS:	
	General Components (GCOM)	
	Tools for live-circuit operations, including rubber protective equipment, and linemen's tools	3423
	Roof bolts	3452
	Rough hardware-nails, bolts, screws, etc.	3452
	Various sizes of valves, fittings and pressure regulators	3494
	Light equipment and hand tools (including electric powered) for carpentry, masonry, plumbing and excavation	3423
	Pipe installation materials and equipment	3229
	Rigging tools-cables, ropes, tackle, hoists, etc.	3429
	General Industrial Equipment (GIEQ)	
	Pumps for loading and unloading	3561
	Chemical feeders	3559
	Mobile and portable pressure filters	3569
	Pumps and appurtenances, hand-electric-gasoline-diesel	3561
	Couplings, clamps, for emergency repairs	3429
	Conveyor belting	3069
	Refrigerators, mechanical	3632
	Sewer pipe and fittings	3321
	Various sizes of pipe (mostly steel)	3317
	Wall casing	3312
	Drive pipe and drive points	3317
	IRON AND STEEL (STEE)	
	Shoes and other footwear	3141
	Gloves and mittens	3151
	Welding equipment and supplies (electric and acetylene)	3623
	Light equipment and hand tools (including electric powered) for carpentry, masonry, plumbing, and excavation	3548
	LEATHER, SHOES, AND ALLIED PRODUCTS (LEAT)	
	METALWORKING EQUIPMENT (MWEQ)	

MISCELLANEOUS METALS AND MINERALS (MSMN)	Diatomaceous earth	3295
	Pulverized limestone	3295
POWER EQUIPMENT (POWR)	Prime mover generator sets up to 501 kilowatts and 2400 volts, including portable and mobile sets up to 150 kilowatts and 110/220/440 volts, 3-phase, 60-cycle complete with fuel tank and switchgear in self-contained units	3621
	Chlorinators (gas and hypochlorites)	3589
PRINTING AND PUBLISHING (PRIN)	Warning signs-biological, chemical, and radiological contamination	3993
SCIENTIFIC, MOTION PICTURE AND PHOTOGRAPHIC PRODUCTS:		
Motion Picture and Photographic Products (MOTP)	None	
Scientific Instruments and Technical Equipment (SITE)	Adhesive plaster	3842
	Bacteriological culture media and apparatus	3811
	Bandage, gauze	3842
	Bandage, muslin	3842
	Bandage, plaster of paris	3842
	Blood recipient sets	3841
	Surgical pads	3842
	Stockinette, surgical	3842
	Airway, pharyngeal	3841
	Anesthesia apparatus	3841
	Blade, surgical knife	3841
	Chisel, bone	3841
	Forceps, dressing	3841
	Forceps, hemostatic	3841
	Forceps, obstetrical	3841
	Forceps, tissue	3841
	Handles, surgical knife	3841
	Holder, suture needle	3841
	Laryngoscope	3841
	Light, surgical, portable	3842
	Litter	3841
	Mallet, bone surgery	3841
	Needles, hypodermic, reusable	3841
	Needles, suture, eyed	3841
	Otoscope and ophthalmoscope set	3841
	Probe, general operating	3841
	Retractor set, general operating	3841
	Saw, amputating	3841
	Saw, bone cutting, wire (Gigli)	3841
	Scissors, bandage	3841
	Scissors, general surgical	3841
	Sigmoidoscope	3841
	Speculum, vaginal	3841
	Sphygmomanometer	3842
	Splint, leg, Thomas	3842
	Splint, wire, ladder	3842
	Sterilizer, pressure, portable	3842
	Stethoscope	3841
	Sutures, absorbable	3842
	Sutures, absorbable, with attached needle	3842
	Sutures, nonabsorbable	3842
	Sutures, nonabsorbable, with attached needle	3842
	Syringes, Luer, reusable (hypodermic syringes)	3841
	Thermometers, clinical	3821
	Balance, laboratory with weights	3811
	Microscope and slides	3831
	Blood donor sets	3841
	Intravenous injection sets	3841
	Knife, cast cutting	3421
	Retractor, rib	3841
	Rongeur, bone	3841
	Tracheotomy tube	3841
	Vascular prostheses	3842
	First aid items (included on Health Supplies and Equipment List)	3841
		3842
		3821
	Calibrators	3811
	Chemical agent detection kits, air, food, and water	3821
	Dosimeters and chargers	3821
	Protective masks, clothing, helmets	3842
	Survey meters (Alpha, Beta, and Gamma)	3821
	Membrane filter kits with filters and media	3811
	Chlorine and pH determination equipment	3811
	Catheter, urethral	3841
	Inhaler, anesthesia, Yankauer (ether mask)	3841
	Water purification apparatus	3811
	Cotton, USP	3842

TEXTILES AND CLOTHING (TEXT)	Wadding, cotton sheet	2293
	Blood and urine analysis instruments, equipment and supplies	3811
	Headwear	2352
	Hosiery	2251
	Outerwear:	
	Knit	2253
	Men's, Youths' & Boys' suits, coats, & overcoats	2311
	Men's, etc. shirts (except workshirts)	2321
	Men's etc. separate trousers	2327
	Workclothing	2328
	Men's etc. outerwear, n.e.c.	2329
	Women, misses, Juniors blouses, waists, & shirts	2331
	Women's misses, & Juniors dresses	2335
	Women's etc. suits, skirts & coats, except fur coats and raincoats	2337
	Women's etc. outerwear n.e.c.	2339
	Girls, childrens & infants dresses, blouses, waists & shirts	2361
	Girls, etc. coats & suits	2363
	Girls, etc. outerwear, n.e.c.	2369
	Underwear:	
	Knit (in knitting mills)	2254
	Mens, youths, & boys	2322
	Womens, misses, childrens & infants	2341
	Corsets & all bed garments	2342
		2389
	Diapers, all types	2211
	Bedding	2211
	Webbing, textile, with buckle	2241
	Tents and tarpaulins; canvas, plastics, and other similar materials	2394
	Sleeping bags	2399

WATER AND SEWERAGE INDUSTRY
AND UTILITIES (WATR)

None. Covered by another resource agency

DOCUMENTS RESEARCHED

- An Initial (Synoptic) Prototype State Crisis Relocation Plan: Working Draft
- CPG 2-8-A-1 January, 1976. Guide for Crisis Relocation Contingency Planning (DCPA)
- Government Authority and Continuity in Support of Crisis Relocation RS-2-8-20 September, 1978 (DCPA)
- State of Nebraska Resource Crisis Management Study Final Report, March 9, 1978
- Operational Resource Crisis Management Plan - State of Nebraska Civil Defense Agency
- Iowa Emergency Resource Management Plan, April 14, 1966, Revised June, 1967
- State of Arizona Emergency Plan, January 31, 1966
- State of Hawaii Plan for Emergency Preparedness Emergency Management of Resources, Volume II, dated August 24, 1967
- Joint Federal-State Resource Management Seminar, May 18, 1977 (Federal Preparedness Agency, New York, New York)
- Part I: State and Regional Level Planning Working Draft CPG 2-8-A, August, 1976; Guide for Crisis Relocation Contingency Planning (DCPA)
- Part II: Allocation and Emergency Public Information Working Draft CPG 2-8-B August, 1976; Guide for Crisis Relocation Contingency Planning (DCPA)
- Part III: Host Area Planning Working Draft CPG 2-8-C, January, 1976; Guide for Crisis Relocation Contingency Planning (DCPA)
- Part IV: Risk Area Planning Working Draft CPG 2-8-D, January, 1976; Guide for Crisis Relocation Contingency Planning (DCPA)
- Part V: Organizational Planning for Crisis Relocation Working Draft CPG 2-8-E, January, 1976; Guide for Crisis Relocation Contingency Planning (DCPA)
- A Prototype Risk Area Plan Working Draft CPG 2-8-D-1, October, 1976; Guide for Crisis Relocation Contingency Planning (DCPA)
- Volume I: Analysis and Case Study, CPG 2-8-1, September, 1975; Food Systems Support of the Relocation Strategy (DCPA)

- Volume II: Prototype Plans CPG 2-8-2, September, 1975; Food Systems Support of the Relocation Strategy (DCPA)
- Volume III: Planning Guidelines CPG 2-8-2, September, 1975; Food Systems Support of Relocation Strategy (DCPA)
- Texas Emergency Resource Management Plan, November, 1966, updated February, 1971. Now is Appendix VIII to Annex AA State Disaster Plan (State of Texas)
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ABSTRACT

This document is Volume I of Texas Emergency Resource Management (TERM), a study which analyses the methods, procedures and techniques for constructing a state plan for the emergency management of resources in a nuclear attack emergency or crisis relocation of the population from high risk areas to areas of lesser risk. The study contains organizational charts for each grouping of essential resources and assignment of responsibilities for state agency action as well as a model state plan in Volume II. Volume I also contains information and ideas from seven of nine states queried relative to emergency resources management during the crisis relocation phase of a national emergency.

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